| Myrmecological News 20 Digital supplem | entary material |
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## Digital supplementary material to

LANAN, M. 2014: Spatiotemporal resource distribution and foraging strategies of ants (Hymenoptera: Formicidae). – Myrmecological News 20: 53-70.

**Tab. S1:** Data and citations for information presented in Figure 3 and Figure S1. Note that no data in any column indicates a lack of reports in the literature. For instance, no data in the column for nesting strategy should not be interpreted as a positive report of strict monodomy, and ants may collect foods that have not been reported.

| Species                        | Resource collected  | Foraging strategy  | Nesting strategy  |
|--------------------------------|---|--|---|
| Acanthognathus rudis           | Small prey: collembola (GRONENBERG & al. 1998)  | Solitary foraging (GRONENBERG & al. 1998)  |   |
| Acromyrmex ambiguus            | Leaves (FOWLER 1985,<br>SAVERSCHEK & ROCES 2011)  | Trunk trails, partially subterranean (FOWLER 1985) trails (SAVERSCHEK & ROCES 2011)                                    |   |
| Acromyrmex balzani             | Grass (LOPES & al. 2004)  | Recruitment, type = ? (LOPES & al. 2004)<br>Solitary foraging (PODEROSO & al. 2009)<br>Solitary foraging (FOWLER 1985) | Polydomy (ICHINOSE & al. 2006)  |
| Acromyrmex coronatus           | Leaves (WETTERER 1995)  | Trunk trails (WETTERER 1995)   |   |
| Acromyrmex crassispinus        | Leaves (FOWLER 1985)  | Two to five trunk trails (FOWLER 1985)   |   |
| Acromyrmex disciger            | Leaves (FOWLER 1985)  | Trunk trails (FOWLER 1985)   |   |
| Acromyrmex fracticornis        | Grass (FOWLER & ROBINSON 1977)  | Solitary (FOWLER & ROBINSON 1977)  |   |
| Acromyrmex heyeri              | Grass (BOLLAZZI & ROCES 2011)   | Trunk trails (FOWLER 1985, BOLLAZZI & ROCES 2011)  |   |
| Acromyrmex hispidus fallax     | Leaves (FOWLER 1985)  | Trunk trails (FOWLER 1985)   |   |
| Acromyrmex laticeps            | Leaves (FOWLER 1985)  | Trunk trails (FOWLER 1985)   |   |
| Acromyrmex lobicornis          | Leaves (ELIZALDE & FARJI-BERNER 2012)   | Trunk trails (ELIZALDE & FARJI-BERNER 2012)  |   |
| Acromyrmex lundii              | Leaves (FOWLER 1988), mush-rooms (LECHNER & JOSENS 2012)  | Trunk trails (FOWLER 1988)   |   |
| Acromyrmex niger               | Leaves (SOUSA-SOUTO & al. 2005)   | Trunk trails (SOUSA-SOUTO & al. 2005)  |   |
| Acromyrmex octospinosus        | Leaves and detritus (WETTERER & al. 1998)   | Trunk trails (WETTERER & al. 1998)   |   |
| Acromyrmex lundii<br>pubescens | Leaves (FOWLER 1985)  | Up to six trunk trails (FOWLER 1985)   |   |
| Acromyrmex rugosus             | Fallen flowers, some leaves (FOW-<br>LER 1985)  | "Does not construct well-defined trails" (FOWLER 1985)   |   |
| Acromyrmex striatus            | Leaves and grass (FOWLER 1985)  | Trunk trails (FOWLER 1985)   |   |
| Acromyrmex subterraneus        | Leaves and seeds (FOWLER 1985)  | Trunk trails (NASCIMENTO & al. 1994)   |   |
| Acromyrmex versicolor          | Leaves and detritus (GAMBOA 1975)   | Solitary foraging, trunk trails (GAMBOA 1975)  |   |
| Acropyga sauteri               | Trophobiont honeydew: obligate nest symbiont, root mealybug (KISHIMOTO-YAMADA & al. 2005, SCHNEIDER & LAPOLLA 2011) | Tend trophobionts underground in nest (KISHI-MOTO-YAMADA & al. 2005)   | Nest is dispersed in a ~30 cm area around plant roots, but is not polydomous (KISHI-MOTO-YAMADA & al. 2005) |
| Aenictus gracilis              | Ant nests (HIROSAWA & al. 2000)   | Column raids (HIROSAWA & al. 2000)   | Nomadic (HIROSAWA<br>& al. 2000)  |
| Aenictus laeviceps             | Ant nests (HIROSAWA & al. 2000)   | Column raids (HIROSAWA & al. 2000)   | Nomadic (HIROSAWA<br>& al. 2000)  |

| Amblyopone australis     | Small prey, large prey (PEETERS & MOLET 2010)  | Group recruitment (HÖLLDOBLER & PALMER 1989)   | Nests are diffuse in rotting logs (HÖLL-DOBLER & PALMER 1989)                    |
|--------------------------|--|--|--|
| Amblyopone longidens     | Small prey (HÖLLDOBLER & PAL-<br>MER 1989)   | Group recruitment (HÖLLDOBLER & PALMER 1989)   |  |
| Aneuretus simoni         | Small prey, dead insects, rotting fruit, nectar, possible trophobionts in nest? (JAYASURIYA & TRANIELLO 1985)                          | Solitary foraging, short-term trails (JAYASURIYA & TRANIELLO 1985)   | Polydomous (JAYA-<br>SURIYA & TRANI-<br>ELLO 1985)                               |
| Anochetus traegaordhi    | Small prey: single termites (SCHATZ & al. 1999)  | Solitary foraging (SCHATZ & al. 1999)  |  |
| Anonychomyrma gilberti   | EFN, honeydew (BLUTHGEN & al. 2004)  | Trail network, likely long-term (Lanan, personal observation, QLD Australia, 2011)   |  |
| Anoplolepis custodiens   | Small prey, dead insects, EFN, honey-<br>dew (ADDISON & SAMWAYS 2006)  | "Long trails" (MPURU & BRAND 1993) "randomly running" everywhere, crazy ant (LOHR 1992)  | Polydomous (LOHR 1992)   |
| Anoplolepis gracilipes   | Small prey, dead insects, large prey, carrion, honeydew (HAINES & HAINES 1978, LIZON A L'ALLE-MAND & WITTE 2010)                       | Short-term trails, long-term trails type =? (LIZON A L'ALLEMAND & WITTE 2010) run everywhere, crazy ant (HAINES & HAINES 1978, ABBOTT 2005)  | Supercolonial, polydomous (LIZON A L'ALLEMAND & WITTE 2010)                      |
| Anoplolepis tenella      | Small prey, dead insects, honey-<br>dew, trophobiont nest symbionts<br>(KUATE & al. 2008)  | Rarely use trails, type =?, run everywhere at high density, crazy ant (KUATE & al. 2008)   | Possibly supercolonial, polydomous (KUATE & al. 2008)                            |
| Aphaenogaster albisitosa | Dead insects, seeds (JOHNSON 2000), fruit (WETTERER & al. 2002)  | Solitary foraging, group recruitment, volatile recruitment (HÖLLDOBLER & al. 1995)   |  |
| Aphaenogaster araneoides | Dead insects (MCGLYNN & al. 2004)  | Solitary foraging (McGLYNN & al. 2004), group recruitment (McGlynn, personal communication)  | Rotate between several nests (MCGLYNN & al. 2004)                                |
| Aphaenogaster cockerelli | Small prey: termites, dead insects, seeds, honeydew (SANDERS & GORDON 2002)  | Solitary foraging, group recruitment (SANDERS & GORDON 2002), volatile recruitment (HÖLL-DOBLER & al. 1995)  | Polydomy (SANDERS<br>& GORDON 2002)  |
| Aphaenogaster iberica    | Dead insects, seeds (LENOIR & al. 2011)  | Solitary foraging, will follow trail pheromone extracts without scout (LENOIR & al. 2011)  |  |
| Aphaenogaster longiceps  | Eliasomes (HUGHES & WESTOBY 1992), other foods?  | Solitary foraging (HUGHES & WESTOBY 1992)  |  |
| Aphaenogaster rudis      | Small prey: termites (BUCZKOW-SKI & BENNETT 2008a) sugary liquids, small prey (BANSCHBACH & al. 2006), eliasomes (HEITHAUS & al. 2005) | Group recruitment (ATTYGALLE & al. 1998)   |  |
| Aphaenogaster senilis    | Small prey, large prey, dead insects (CERDÁ & al. 1998), eliasomes (ESPADALER & GOMEZ 1997), sugary liquids (AGBOGBA 1985)             | Solitary foraging, group recruitment (CERDÁ & al. 1998, VAN OUDENHOVE & al. 2012) will follow trail pheromone extracts without scout (LENOIR & al. 2011)   |  |
| Apterostigma collare     | seeds, anthers, insect frass, and detritus as fungal substrate (PITTS-SINGER & ESPELIE 2007)   | Trails: type =? (PITTS-SINGER & ESPELIE 2007)  |  |
| Atopomyrmex mocquerysi   | Small prey, large prey, EFN, sap, honeydew, seeds (KENNE & al. 2009)   | Solitary hunting, volatile recruitment, short-<br>term trails, "main foraging trails" to the ground<br>and other foraging areas. These are likely long-<br>term trails, but type =? (KENNE & al. 2009) | Nests are a network<br>of galleries under<br>bark of trees (KENNE<br>& al. 2009) |
| Atta bisphaerica         | Grass (MOREIRA & al. 2004)   | Trunk trails (MOREIRA & al. 2004)  |  |
| Atta capiguara           | Leaves (FOWLER 1985)   | Trunk trails (FOWLER 1985)   |  |
| Atta cephalotes          | Leaves (FARJI-BRENER & SIERRA<br>1998)   | Trunk trails (FARJI-BRENER & SIERRA 1998)  |  |
| Atta colombica           | Leaves (HOWARD 2001)   | Trunk trails (HOWARD 2001)   |  |
| Atta laevigata           | Leaves and grass (FOWLER 1985)   | Trunk trails up to 60m (FOWLER 1985)   |  |
| Atta mexicana            | Leaves (MINTZER 1979)  | Trunk trails (MINTZER 1979)  |  |

| Atta saltensis             | Leaves (FOWLER 1985)  | Trunk trails up to 150 m (FOWLER 1985)  |  |
|----------------------------|---|---|--|
| Atta sexdens               | Leaves (FOWLER 1985), eliasomes (PETERNELLI & al. 2009)   | Trunk trails (FOWLER 1985)  |  |
| Atta texana                | Leaves (WALLER 1989b)   | Trunk trails (WALLER 1989b)   |  |
| Atta vollenweideri         | Grass (ROSCHARD & ROCES 2003a) (FOWLER 1985)  | Trunk trails (ROSCHARD & ROCES 2003a) (FOWLER 1985)   |  |
| Azteca chartifex           | Trophobiont symbionts in carton nests (DEJEAN & al. 2008), collect other unknown items at end of trails (WILSON 1965) | Likely short-term trails although a leading scout was not tested for (DEJEAN & al. 2008), long-term trail network (WILSON 1965, HÖLLDOBLER & WILSON 1990) | Polydomous (DEJEAN & al. 2008)   |
| Azteca instabilis          | Honeydew (LIERE & al. 2012)   | ?   |  |
| Azteca lanuginosa          | Large prey, honeydew use "rare" (MORAIS 1994)   | Ambush prey from under leaves (MORAIS 1994), "well-marked trail system" (DE MORAIS 1998), probably a long-term trail network (?)                          | polydomous<br>(MORAIS 1994)  |
| Azteca trigona             | Honeydew, small prey, dead insects (ADAMS 1994)   | Long-term trail network (ADAMS 1994)  | Polydomous (ADAMS 1994)  |
| Azteca velox               | Honeydew, small prey, dead insects (ADAMS 1994)   | Long-term trail network (ADAMS 1994)  | Polydomous (ADAMS 1994)  |
| Basiceros manni            | Small prey (WILSON & HÖLLDOB-<br>LER 1986)  | Solitary foraging (WILSON & HÖLLDOBLER 1986)  |  |
| Blepharidatta conops       | Small prey, dead insects, EFN, honeydew (DINIZ & al. 1998)  | Solitary foraging and either group recruitment or short-term trails, more likely group due to the low numbers of recruits (DINIZ & al. 1998)              |  |
| Blepharidatta brasiliensis | Small prey including ants, dead insects, EFN, "possibly" honeydew (RABELING & al. 2006)                               | ?   |  |
| Brachymyrmex obscurior     | EFN, honeydew (MOYA-RAYGOZA & LARSEN 2001)  | Trails, type =? (MOYA-RAYGOZA & LARSEN 2001)  |  |
| Brachymyrmex patagonicus   | EFN, honeydew (MACGOWN & al. 2007)  | Short-term trails, long-term trail network (Lanan, personal observation, Tucson AZ 2013)  | Polydomous (Lanan, personal observation)   |
| Camponotus arminius        | EFN, plant secretions (BRAND & al. 1999)  | Long trails, type =? (BRAND & al. 1999)   |  |
| Camponotus brutus          | Honeydew (MERCIER & DEJEAN 1996), trophobionts (DEJEAN & al. 2000)  | Short-term trails to bait (DELEPORTE & al. 2002), other foraging methods unknown  | Polydomous (MER-CIER & DEJEAN 1996),<br>build pavilions for<br>trophobionts (DEJEAN<br>& al. 2000) |
| Camponotus cruentatus      | Dead insects, seeds, honeydew, bird droppings (ALSINA & al. 1988)   | Group recruitment (BOULAY & al. 2007), solitary foraging (ALSINA & al. 1988)  |  |
| Camponotus detritus        | Honeydew, pollen, nectar, dead insects, bird and lizard droppings (Curtis 1985b, c)                                   | Solitary, probably a long-term trail network (CURTIS 1985c)   | Polydomous, nests up<br>to 100m apart (CURTIS<br>1985c)  |
| Camponotus floridanus      | EFN (DREISIG 2000)  | Trails, type =? (HAAK & al. 1996)   |  |
| Camponotus gigas           | 90% EFN and honeydew, small prey, bird droppings, large carrion (PFEIFFER & LINSENMAIR 2000)                          | Arboreal long-term trail network, group recruitment, solitary foraging on ground (PFEIFFER & LINSENMAIR 1998, 2000)                                       | Polydomous (PFEIFFER & LINSENMAIR 2000)  |
| Camponotus mirabilis       | Trophobionts, occasionally small prey (DAVIDSON & al. 2006)   | ?   | Polydomous (DAVID-<br>SON & al. 2006)  |
| Camponotus modoc           | Honeydew (TILLES & WOOD 1986)   | Long-term trails, unclear whether network or trunk trails (TILLES & WOOD 1986)  | Polydomous (TILLES & WOOD 1986)  |
| Camponotus pennsylvanicus  | Small prey, dead insects, honeydew, plant and fruit juices (TRANIELLO 1977)   | Long-term trail network (BUCZKOWSKI 2011)   | Polydomous<br>(BUCZKOWSKI 2011)  |
| Camponotus rufipes         | EFN, nectar (SCHILMAN & ROCES 2006), small prey, honeydew (JAFFE & SANCHEZ 1984)                                      | Trails, type =? (JAFFE & SANCHEZ 1984)  |  |

| Camponotus senex                        | Small prey, dead insects, EFN, honeydew, fruit (SANTOS & DEL-CLARO 2009)                             | Trails, type =? (SANTOS & al. 2005)   | Polydomous (SANTOS & DEL-CLARO 2009), colony size: 60000 |
|---|--|---|--|
| Camponotus sericeiventris               | Small prey, dead insects, EFN, honeydew, seeds, droppings, fruit (YAMAMOTO & DEL-CLARO 2008)         | Solitary foraging, recruitment of small groups but unclear whether group recruitment or trail recruitment (YAMAMOTO & DEL-CLARO 2008) |  |
| Camponotus sericeus                     | EFN (MODY & LINSENMAIR 2003)   | Solitary foraging (MODY & LINSENMAIR 2003), tandem running (HOLDOBBLER & al. 1974)  |  |
| Camponotus socius                       | Dead insects, honeydew (HÖLL-DOBLER 1971)  | Group recruitment, long-term trail network (HÖLLDOBLER 1971)  | Polydomous (HÖLL-<br>DOBLER 1971)                        |
| Cardiocondyla obscurior                 | ?  | Solitary foraging, tandem running (HEINZE & al. 2006)   |  |
| Cataglyphis bicolor                     | Dead insects (SCHMID-HEMPEL 1984)  | Solitary foraging (SCHMID-HEMPEL 1984)  | Polydomous (SCHMID-HEMPEL 1987)                          |
| Cataglyphis bombycina                   | Dead insects (WEHNER & WEHNER 2011)  | Solitary foraging (WEHNER & WEHNER 2011)  |  |
| Cataglyphis cursor                      | ?  | Solitary foraging (CHAMERON & al. 1998)   |  |
| Cataglyphis floricola                   | Flower petals, dead insects (CERDÁ & al. 1992)   | Solitary foraging. Recruitment via excitement of foragers can occur, but no directional information is communicated (AMOR & al. 2010) |  |
| Cataglyphis fortis                      | Dead insects (WOLF & WEHNER 2000)  | Solitary foraging (WOLF & WEHNER 2000)  |  |
| Cataglyphis iberica                     | Dead insects (CERDÁ & al. 2002)  | Solitary foraging (CERDÁ & al. 2002)  | Polydomous (CERDÁ<br>& al. 2002)                         |
| Cataglyphis niger                       | Dead insects (WENSELEERS & al. 2002)   | Solitary foraging (WENSELEERS & al. 2002)   |  |
| Cataglyphis rosenhaueri                 | Dead insects (CERDÁ & RETANA 2000)   | Solitary foraging (CERDÁ & RETANA 2000)   |  |
| Cataglyphis savignyi<br>(C. desertorum) | Dead insects (DIETRICH & WEHNER 2003, WEHNER & WEHNER 2011)  | Solitary foraging (DIETRICH & WEHNER 2003) (WEHNER & WEHNER 2011)   |  |
| Cataglyphis velox                       | Dead insects (CERDÁ & RETANA 1997)   | Solitary foraging (CERDÁ & RETANA 1997)   |  |
| Centromyrmex bequaerti                  | Small prey: termites (DEJEAN & FENERON 1999)   | Solitary foraging, group recruitment (DEJEAN & FENERON 1999)  |  |
| Cephalotes atratus                      | Small prey, dead insects, carrion,<br>EFN, honeydew, bird droppings,<br>fruit (CORN 1980)            | "well established trails", unclear whether network or trunk trails (POINAR & YANOVIAK 2008)   | Polydomous (CORN<br>1980)                                |
| Cephalotes goniodontus                  | EFN, plant sap, bird and lizard droppings (GORDON 2012)  | Long-term trail network (GORDON 2012)   | Polydomous (GORDON 2012)                                 |
| Cerapachys biroi                        | Ant nests: brood (RAVARY & al. 2007)   | Solitary foraging, tandem running observed in lab (RAVARY & JAISSON 2002), group raids (RAVARY & al. 2006)                            | Nomadic (RAVARY & JAISSON 2002)                          |
| Cerapachys turneri                      | Ant nests: <i>Pheidole</i> brood (HÖLL-DOBLER 1982)  | Group raids (HÖLLDOBLER 1982)   |  |
| Cheliomyrmex andicola                   | Large prey (O'DONNELL & al. 2005)  | Raids (O'DONNELL & al. 2005)  | Nomadic (O'DON-<br>NELL & al. 2005)                      |
| Crematogaster clariventris              | Honeydew (CAMPBELL 1994)   |   |  |
| Crematogaster difformis                 | Small prey, honeydew (TANAKA & al. 2009), honeydew from trophobionts inside nest (TANAKA & al. 2009) | Trails, type =? (TANAKA & al. 2012)   | Polydomous?<br>(TANAKA & al. 2012)                       |
| Crematogaster opuntiae                  | Small prey: termites, EFN, honeydew (NESS & al. 2006, LANAN & BRONSTEIN 2013)                        | Long-term trail network, (LANAN & BRONSTEIN 2013) short-term trails, volatile recruitment (Lanan, personal observation)               | Polydomous (Lanan & Bronstein 2013)                      |
| Crematogaster scutellaris               | Small prey, honeydew (SANTINI & al. 2011) carrion (BONACCI & al. 2011)                               | Long-term trail network (SANTINI & al. 2011)  | Polydomous (SANTINI & al. 2011)                          |

| Crematogaster striatula                                       | Small prey: termites (RIFFLET & al. 2011), EFN (DEJEAN 2000)                                 | Trails, type =? (RIFFLET & al. 2011)   |  |
|---|--|--|--|
| Crematogaster torosa  | Small prey, dead insects, EFN (LANAN & al. 2011), honeydew (Lanan, personal observation)     | Long-term trail network (LANAN & al. 2011), short-term trails (Lanan, personal observation)  | Polydomous, build<br>outstations (LANAN<br>& al. 2011)                                   |
| Cylindromyrmex whymperi                                       | Small prey: groups of termites (GOBIN & al. 2001)  | Group raids (GOBIN & al. 2001)   | Nest frequently relocated (GOBIN & al. 2001)   |
| Daceton armigerum   | Small prey, large prey, honeydew (DEJEAN & al. 2012)   | Group recruitment, short-term trails, long-term trail network (pheromone lasts up to 7 days and links nests), solitary, volatile recruitment (HÖLL-DOBLER & al. 1990, DEJEAN & al. 2012)                                     | Polydomous (DEJEAN & al. 2012)   |
| Decamorium decem  | Small prey (DUROU & al. 2001)  | Solitary foraging (DUROU & al. 2001)   |  |
| Decamorium uelense  | Groups of small prey: termites (LONGHURST & al. 1979)  | Solitary foraging, group recruitment (?), short-term trails. The initial phase of recruitment is like group recruitment with a scout, but then transitions to leaderless short-term trail recruitment (LONGHURST & al. 1979) |  |
| Diacamma rugosum  | Small prey (KE & al. 2011), sugary liquids? (MASCHWITZ & al. 1986)                           | Solitary foraging (MASCHWITZ & al. 1986)   |  |
| Dinoponera gigantea   | Small prey, large prey, dead insects, fruit, seeds, plant parts (FOURCASSIE & OLIVEIRA 2002) | Solitary foraging (FOURCASSIE & OLIVEIRA 2002)   | Polydomy (FOUR-<br>CASSIE & OLIVEIRA<br>2002)  |
| Dinoponera quadriceps   | Small prey, dead insects, seeds, small fruit (ARAUJO & RODRIGUES 2006)                       | Solitary foraging (ARAUJO & RODRIGUES 2006)  |  |
| Dolichoderus coniger  | Trophobionts (JOHNSON & al. 2001)  | Specialized trophobiont herding (JOHNSON & al. 2001)   | Nomadic (JOHNSON & al. 2001)   |
| Dolichoderus cuspidatus                                       | Trophobionts (MASCHWITZ & HÄNEL 1985)  | Specialized trophobiont herding (MASCHWITZ & HANEL 1985)   | Nomadic (MASCH-<br>WITZ & HÄNEL 1985)  |
| Dolichoderus erectilobus                                      | Trophobionts (JOHNSON & al. 2001)  | Specialized trophobiont herding (JOHNSON & al. 2001)   | Nomadic (JOHNSON & al. 2001)   |
| Dolichoderus feae   | Trophobionts (JOHNSON & al. 2001)  | Specialized trophobiont herding (JOHNSON & al. 2001)   | Nomadic (JOHNSON & al. 2001)   |
| Dolichoderus furcifer   | Trophobionts (JOHNSON & al. 2001)  | Specialized trophobiont herding (JOHNSON & al. 2001)   | Nomadic (JOHNSON & al. 2001)   |
| Dolichoderus gibbifer   | Trophobionts (JOHNSON & al. 2001)  | Specialized trophobiont herding (JOHNSON & al. 2001)   | Nomadic (JOHNSON & al. 2001)   |
| Dolichoderus mariae   | Dead insects, honeydew (LASKIS & TSCHINKEL 2009)   | Long-term trail network (LASKIS & TSCHINKEL 2009)  | Polydomous (LASKIS & TSCHINKEL 2009)   |
| Dolichoderus sulcaticeps                                      | Honeydew, trophobionts (ROHE & MASCHWITZ 2003)   | Long-term trail network (ROHE & MASCHWITZ 2003)  | Polydomous (ROHE & MASCHWITZ 2003)   |
| Dolichoderus thoracicus                                       | Honeydew (WAY & KHOO 1991)   | Long-term trail network (WAY & KHOO 1991)  | Polydomous (WAY & KHOO 1991)   |
| Dolichoderus tuberifer  | Trophobionts (JOHNSON & al. 2001)  | Specialized trophobiont herding (JOHNSON & al. 2001)   | Nomadic (JOHNSON & al. 2001)   |
| Dorylus laevigatus  | Small prey, dead insects, termite nests (BERGHOFF & al. 2002a)                               | Raids, map shows long-term trail network (BERGHOFF & al. 2002a) Trail system might be shaped more like a trunk trail system in other habitats. Dig tunnels for raids (WEISSFLOG & al. 2000)                                  | Unclear if nomadic,<br>stayed in same location<br>for months (BERG-<br>HOFF & al. 2002a) |
| Dorylus nigricans<br>(Dorylus molestus)<br>(Dorylus rubellus) | Small prey, large prey, termite nests (SCHÖNING & al. 2005, SCHÖNING 2007)                   | Raid, use longer-term trails that are tunnels or covered in soil. Trail structure is unclear (SCHÖ-NING & al. 2005).   | Nomadic (SCHÖNING & al. 2005)  |
| Dorylus orientalis  | Large roots including potatoes, tubers, peanuts, seedling coconuts (NIU & al. 2010)          | ?  | Possibly nomadic? (NIU & al. 2010)   |
| Dorylus vishnui   | Small prey, large prey (BERGHOFF & al. 2003)   | Raids, authors discuss the possibility of long-term subterranean trails (BERGHOFF & al. 2003)  |  |

| Dorylus wilverthi           | Small prey (FRANKS & al. 2001,<br>SCHÖNING & al. 2008)   | Raids (FRANKS & al. 2001)   | Nomadic (FRANKS & al. 2001)                                   |
|-----------------------------|--|---|---|
| Dorymyrmex flavus           | Small prey, dead insects, EFN (WARRINER & al. 2008)  | ?   | Polydomous (WAR-RINER & al. 2008)                             |
| Dorymyrmex goetschi         | Small prey, dead insects, seeds (TORRES-CONTRERAS & VASQUEZ 2004)  | Group recruitment? (TORRES-CONTRERAS & VASQUEZ 2007)  |   |
| Dorymyrmex insanus          | Small prey, dead insects, EFN (KASPARI & VALONE 2002) honeydew (Lanan, personal observation)                                   | Solitary foraging, short-term trails, possibly group recruitment? (Lanan, personal observation)           | Polydomous (Lanan, unpublished)                               |
| Eciton burchellii           | Small prey, large prey, ant nests (FRANKS & FLETCHER 1983)   | Raids (FRANKS & FLETCHER 1983)  | Nomadic (FRANKS & FLETCHER 1983)                              |
| Eciton hamatum              | Small prey, large prey, ant nests (SOLE & al. 2000, POWELL 2011)   | Raids (SOLE & al. 2000)   | Nomadic (SOLE & al. 2000)                                     |
| Eciton mexicanum            | Ant nests (ZARA & FOWLER 2007)   | Raids (ZARA & FOWLER 2007)  | Nomadic (ZARA & FOWLER 2007)                                  |
| Eciton rapax                | Ant nests (BURTON & FRANKS 1985)   | Raids (SOLE & al. 2000)   | Nomadic (SOLE & al. 2000)                                     |
| Eciton vagans               | Small and large prey (SCHNEIRLA 1934)  | Raids (SCHNEIRLA 1934)  | Nomadic (SCHNEIRLA 1934)                                      |
| Ectatomma brunneum          | Small prey (GOMES & al. 2009)  | Solitary foraging (GOMES & al. 2009), possibly group recruitment (?) (ALBINO & al. 2008)                  |   |
| Ectatomma opaciventre       | Small prey: termites and leafcutter ants, dead insects (PIE 2004)  | Solitary foraging (PIE 2004)  |   |
| Ectatomma ruidum            | Small prey, dead insects, EFN, honeydew (SCHATZ & al. 1995)  | Solitary foraging (SCHATZ & al. 1995), group recruitment (PRATT 1989, SCHATZ & al. 1997)                  |   |
| Ectatomma tuberculatum      | Insect prey, dead insects, EFN, honeydew (FRANZ & WCISLO 2003)   | Solitary foraging, group recruitment (FRANZ & WCISLO 2003)  | Polydomous (ZINCK & al. 2008)                                 |
| Euprenolepis procera        | Mushrooms (WITTE & MASCHWITZ 2008)   | Either group raiding or true raiding, unclear (WITTE & MASCHWITZ 2008)                                    | Nomadic (WITTE & MASCHWITZ 2008)                              |
| Eurhopalothrix biroi        | Small prey (BROWN & WILSON 1959)   | Solitary foraging (BROWN & WILSON 1959)   |   |
| Eurhopalothrix heliscata    | Small prey: termites (WILSON & BROWN 1984)   | Solitary foraging, recruitment by either group recruitment or short-term trails (?) (WILSON & BROWN 1984) | Make outstations<br>away from nest (WIL-<br>SON & BROWN 1984) |
| Forelius mccooki (foetidus) | Small prey, dead insects, EFN, honeydew (Lanan personal observation)   | Long-term trail network, short-term trails (Lanan, personal observation)                                  | Polydomous? (Lanan personal observation)                      |
| Forelius pruinosus          | Small prey (RUDGERS & al. 2003),<br>EFN, floral nectar (NESS 2006),<br>honeydew, trophobionts (Lanan,<br>personal observation) | Long-term trail network, short-term trails, foraging fans (Lanan, unpublished data)                       | Polydomous (Lanan personal observation)                       |
| Formica aquilonia           | Small prey, honeydew (LAMB & OLLASON 1994) (COSENS & TOUSSAINT 1985)   | Either long-term trail network or trunk trails (?) (COSENS & TOUSSAINT 1985, BUHL & al. 2009)             | Polydomous (SORVA-<br>RI & HAKKARAINEN<br>2004)               |
| Formica cinerea             | Small prey, dead insects, honeydew, EFN (MARKÓ & CZECHOWSKI 2012)  | Solitary, long-term trails that are most likely trunk trails (MARKÓ & CZECHOWSKI 2012)                    | Polydomous (MARKÓ<br>& CZECHOWSKI<br>2004, 2012)              |
| Formica exsecta             | Honeydew (MARKÓ & al. 2012)  | Long-term trail network (MARKÓ & al. 2012)  | Polydomous<br>(DOBRZANS.J 1973,<br>MARKÓ & al. 2012)          |
| Formica exsectoides         | Honeydew and small prey (BISHOP & BRISTOW 2001)  | ?   | Polydomous (BRISTOW & al. 1992,<br>BISHOP & BRISTOW 2001)     |
| Formica fusca               | Small prey: aphids (ANDERSEN<br>1991), dead insects (SAVOLAINEN<br>1990)   | Group recruitment (MÖGLICH & HÖLLDOBLER 1975), solitary foraging (SAVOLAINEN 1990, DE BISEAU & al. 1997)  | Polydomous (TUZZO-<br>LINO & BROWN 2010)                      |

| Formica integroides                           | Small prey, dead insects, honeydew (TANNER 2008)  | Solitary (TANNER 2008), long-term trail network (Tanner, personal communication)   |   |
|---|---|--|---|
| Formica lugubris                              | Small prey, dead insects, honeydew (SUDD 1983)  | Long-term trail network (CHERIX 1980)  | Polydomous (CHERIX<br>1980)   |
| Formica montana<br>North American "F. cinera" | Honeydew, EFN, floral nectar<br>(HENDERSON & JEANNE 1992)   | ?  | Polydomous (HEN-<br>DERSON & al. 1990)  |
| Formica obscuripes                            | Honeydew (MCIVER & LOOMIS<br>1993), small prey, carrion (CON-<br>WAY 1997)  | Long-term trail network (O'NEILL 1988, MCIVER & LOOMIS 1993)   | Polydomous (MCIVER & LOOMIS 1993)   |
| Formica pallidefulva<br>(Formica schaufussi)  | 80% small prey, large prey, honeydew (TRANIELLO & al. 1991)   | Solitary foraging, group recruitment (TRANIELLO & BESHERS 1991)  |   |
| Formica planipilis                            | Honeydew (MCIVER & LOOMIS 1993)   | Trunk trails (MCIVER & LOOMIS 1993)  | Polydomous (MCIVER & LOOMIS 1993)   |
| Formica podzolica                             | Small prey, dead insects, honey-<br>dew, EFN (DIAS & BREED 2008)  | Solitary foraging, either group recruitment or short-term trails (?) (DIAS & BREED 2008)   | Polydomous (DEBOUT & al. 2007)  |
| Formica polyctena                             | Small prey, dead insects, honey-<br>dew (MABELIS 1979, NOVGO-<br>RODOVA & BIRYUKOVA 2011),<br>eliaosomes (GORB & GORB 1999) | Trunk trails (SAVOLAINEN 1990, GORDON & al. 1992)  | Polydomous<br>(SAVOLAINEN 1990)   |
| Formica pratensis                             | Small prey, honeydew (PIRK & al. 2001)  | Long-term trails, more similar to a network than to trunk trails in map (?) (PIRK & al. 2001)  | Polydomous (PIRK & al. 2001)  |
| Formica rufa                                  | Small prey, honeydew (LAMB & OLLASON 1994)  | Trunk trails (SKINNER 1980b)   | Polydomous<br>(SKINNER 1980b)   |
| Formica truncorum                             | Small prey, dead insects, honey-<br>dew (SUNDSTROM 1993)  | ?  | Polydomous (ELIAS & al. 2005)   |
| Formica xerophila                             | Small prey, dead insects, honey-<br>dew (TANNER 2008)   | Long-term trail network (Tanner, personal communication)   |   |
| Formica yessensis                             | Dead insects, honeydew (YAO 2012)   | ?  | Supercolonial (YAO 2012)  |
| Gigantiops destructor                         | Small prey, EFN (BEUGNON & al. 2001)  | Solitary foraging (BEUGNON & al. 2001)   | Polydomous (BEUG-<br>NON & al. 2001)  |
| Gnamptogenys horni                            | Small prey including ants (PRATT 1994)  | Short-term trails (although role of scout was not tested) (PRATT 1994)   |   |
| Gnamptogenys menandensis                      | Small prey: termites (JOHNSON & al. 2003)   | Solitary foraging, short-term trails, trunk trails (GOBIN & al. 1998, JOHNSON & al. 2003)  |   |
| Gnamptogenys moelleri                         | Small prey, large prey, EFN (COGNI & OLIVEIRA 2004)   | Solitary foraging, group recruitment or possibly short-term trails, necessity of scout leader unclear (?) (COGNI & OLIVEIRA 2004)  |   |
| Gnamptogenys sulcata                          | Small prey, large prey (DALY-SCHVEITZER & al. 2007)   | Solitary foraging, recruitment most similar to group recruitment, although the scout arrives back at the prey before the recruited group and thus does not physically lead it (DALY-SCHVEITZER & al. 2007) |   |
| Harpegnathos saltator                         | Small prey (SHIVASHANKAR & al. 1989)  | Solitary foraging (SHIVASHANKAR & al. 1989)  |   |
| Iridomyrmex conifer                           | Small prey and dead insects, floral nectar, honeydew, carrion (SHAT-TUCK & MCMILLAN 1998)                                   | Trails, type=? (SHATTUCK & MCMILLAN 1998)  | Polydomous (SHAT-<br>TUCK & MCMILLAN<br>1998)                                 |
| Iridomyrmex purpureus                         | Small prey, honeydew (GREAVES & HUGHES 1974)  | Long-term trail network, solitary (GREAVES & HUGHES 1974, VAN WILGENBURG & ELGAR 2007)   | Polydomous<br>(Greaves &<br>Hughes 1974, van<br>Wilgenburg & El-<br>Gar 2007) |
| Iridomyrmex sanguineus                        | Small prey, honeydew (MCIVER 1991)  | Long-term trail network (MCIVER 1991)  | Polydomous<br>(MCIVER 1991)   |
| Iridomyrmex virideaneus                       | Small prey, dead insects, honey-<br>dew, EFN (MOBBS & al. 1978)<br>eliasomes (WHITNEY 2002)                                 | Long-term trails, type =? (MOBBS & al. 1978)   |   |

| Labidus praedator   | Small prey: caterpillars, seeds, fruit (MONTEIRO & al. 2008) other small prey insects, ant nests (FOW-LER 1979) | Raids (MONTEIRO & al. 2008)  | Nomadic (MONTEIRO & al. 2008)                                  |
|---|---|--|--|
| Lasius austriacus   | Trophobionts, tend mealybugs inside nests (STEINER & al. 2007)  | ?  | Polydomous (STEINER & al. 2007)                                |
| Lasius fuliginosus  | Small prey, large prey, honeydew (QUINET & PASTEELS 1991)   | Trunk trails, short term trails (QUINET & PASTEELS 1991)   |  |
| Lasius grandis  | Small prey, honeydew (PEKAS & al. 2011)   | ?  |  |
| Lasius japonicus  | Honeydew (AKINO & YAMAOKA 2005), termites (NGUYEN & AKINO 2012)   | "trunk trail network system" (AKINO & YAMAOKA 2005)  |  |
| Lasius neoniger   | Dead insects, honeydew, trophobionts (BUCZKOWSKI 2012)  | Solitary, short term trails, group recruitment, volatile recruitment, above-ground trunk trails (TRANIELLO 1983), long-term network of underground tunnels (BUCZKOWSKI 2012) | Polydomous<br>(BUCZKOWSKI 2012)                                |
| Lasius niger  | Dead insects, honeydew, EFN (KATAYAMA & SUZUKI 2003)  | Short-term trails (BECKERS & al. 1993), possibly long-term trails (?)  | Polydomous<br>(PICKLES 1935)                                   |
| Lasius psammophilus   | Small prey, dead insects, honeydew, tend root aphids but unclear whether inside nest (MARKO & CZECHOW-SKI 2004) | Recruitment, type =? (MARKO & CZECHOWSKI 2004)   | Polydomous (MARKO<br>& CZECHOWSKI<br>2004)                     |
| Leptogenys attenuata  | Small prey: amphipods, isopods (DUNCAN & CREWE 1993)  | Solitary foraging, some "cooperative hunting" (DUNCAN & CREWE 1993)  | Nomadic (DUNCAN<br>& CREWE 1993)                               |
| Leptogenys binghamii  | Small prey: termites (MASCHWITZ & MÜHLENBERG 1975)  | Solitary foraging (MASCHWITZ & MÜHLENBERG 1975)  |  |
| Leptogenys bubastis   | Small prey: isopods (DEJEAN & EVRAERTS 1997)  | Solitary foraging, group recruitment (DEJEAN & EVRAERTS 1997)  |  |
| Leptogenys camerunensis   | Small prey: isopods (DEJEAN & EVRAERTS 1997)  | Solitary foraging, group recruitment (DEJEAN & EVRAERTS 1997)  |  |
| Leptogenys chinensis  | Groups of small prey: termites<br>(MASCHWITZ & SCHÖNEGGE<br>1983)   | Solitary, group recruitment (MASCHWITZ & SCHÖNEGGE 1983)   | Move frequently, no-<br>madic (MASCHWITZ<br>& SCHÖNEGGE 1983)  |
| Leptogenys diminuta   | Large prey (MASCHWITZ & MÜH-<br>LENBERG 1975)   | Group raiding, led only sometimes by the scout (MASCHWITZ & MÜHLENBERG 1975)   |  |
| Leptogenys elongata   | Small prey: isopods (DEJEAN & EVRAERTS 1997)  | Solitary foraging (WHEELER 1904), group recruitment (DEJEAN & EVRAERTS 1997)   |  |
| Leptogenys maxillosa<br>(Leptogenys propefalcigera)                   | Small prey: isopods (FREITAS 1995)  | Solitary foraging, possibly group recruitment (?) (FREITAS 1995)   | Nomadic (FREITAS 1995)   |
| Leptogenys nitida   | Small prey, large prey (DUNCAN & CREWE 1994b)   | Raiding, more similar to true raids (DUNCAN & CREWE 1994b)   | Nomadic (DUNCAN<br>& CREWE 1994b)                              |
| Leptogenys processionalis<br>(Leptogenys distinguenda,<br>ocellifera) | Smallprey, large prey (GANESHAIAH & VEENA 1991, WITTE & MASCHWITZ 2000)   | Raiding (WITTE & MASCHWITZ 2000) short term trails, trunk trails (MASCHWITZ & MÜHLENBERG 1975)   | Nomadic (GANESHA-IAH & VEENA 1991,<br>WITTE & MASCH-WITZ 2000) |
| Leptogenys schwabi  | Small prey: isopods, termites (DUNCAN & CREWE 1993)   | Recruitment, type = ? (DUNCAN & CREWE 1993)  | Nomadic (DUNCAN<br>& CREWE 1993)                               |
| Leptogenys sp. 13   | Small prey: earwigs (STEGHAUS-KOVAC & MASCHWITZ 1993)   | Solitary foraging (STEGHAUS-KOVAC & MASCHWITZ 1993)  | Move frequently<br>(STEGHAUS-KOVAC<br>& MASCHWITZ 1993)        |
| Leptogenys sp.  | Small prey, large prey (MASCHWITZ & al. 1989)   | Raiding (MASCHWITZ & al. 1989)   | Nomadic (MASCH-<br>WITZ & al. 1989)                            |
| Leptogenys wheeleri   | Small prey: isopods (DEJEAN & EVRAERTS 1997)  | Solitary foraging, group recruitment (DEJEAN & EVRAERTS 1997)  |  |
| Linepithema humile  | Small prey, dead insects, honeydew, EFN (ABRIL & al. 2007)  | Short-term trails, long-term trail network (HELLER & al. 2008)   | Polydomous, super-<br>colonial (GIRAUD &<br>al. 2002)          |

| Liometopum apiculatum           | Honeydew (RAMOSELORDUY & LEVIEUX 1992), small prey (Lanan, personal observation)  | Long-term trail network (SHAPLEY 1920)   | Polydomous (WANG & al. 2010)   |
|---------------------------------|---|--|--------------------------------|
| Liometopum microcephalum        | Small prey, dead insects, honeydew (SCHLAGHAMERSKY & OMELKOVA 2007)               | Trails, type = ? (PETRAKOVA & SCHLAGHAMER-SKY 2011)                                |                                |
| Liometopum occidentale          | Honeydew (RAMOSELORDUY & LEVIEUX 1992)  | Long-term trail network (SHAPLEY 1920)   | polydomous (WANG & al. 2010)   |
| Mayriella overbecki             | ?   | Trails, type = ? (KOHL & al. 2000)   |                                |
| Melissotarsus beccarii          | Coccids, farmed as prey rather than for honeydew (MONY & al. 2007)                | Dig networks of galleries under tree bark, never venture outside (MONY & al. 2007) |                                |
| Melissotarsus weissi            | Coccids, farmed as prey rather than for honeydew (MONY & al. 2007)                | Dig networks of galleries under tree bark, never venture outside (MONY & al. 2007) |                                |
| Melophorus bagoti               | Mostly dead insects (MUSER & al. 2005), some honeydew (SCHUL-THEISS & CHENG 2013) | Solitary foraging (MUSER & al. 2005)   |                                |
| Melophorus sp.                  | Dead insects (SCHULTHEISS & al. 2012)   | Solitary foraging (SCHULTHEISS & al. 2012)   |                                |
| Meranoplus minimus              | Seeds (ANDERSEN & al. 2000)   | Solitary foraging (ANDERSEN & al. 2000)  |                                |
| Meranoplus sp. (diversus group) | Seeds (ANDERSEN & al. 2000)   | Solitary foraging (ANDERSEN & al. 2000)  |                                |
| Messor aciculatus               | Seeds (YAMAGUCHI 1995)  | Solitary foraging (YAMAGUCHI 1995)   |                                |
| Messor aegyptiacus              | Seeds (PICKLES 1944)  | Foraging columns (BROWN 1999), trunk trails (PLOWES & al. 2013)                    |                                |
| Messor andrei                   | Seeds (BROWN & GORDON 2000)   | Foraging columns (BROWN & GORDON 2000, JOHNSON 2000)                               |                                |
| Messor arenarius                | Seeds (WARBURG 1996)  | Solitary foraging (WARBURG 1996), group recruitment (PLOWES & al. 2013)            |                                |
| Messor barbarus                 | Seeds (LOPEZ & al. 1993)  | Trunk trails (LOPEZ & al. 1993)  | Polydomous (ACOSTA & al. 1995) |
| Messor bouvieri                 | Seeds (WILLOTT & al. 2000)  | Foraging columns (WILLOTT & al. 2000)<br>(CERDÁ & RETANA 1994)                     |                                |
| Messor capensis                 | Seeds (DEAN 1992)   | Solitary foraging (CERDÁ & RETANA 1994),<br>trunk trails (BRAND & MPURU 1993)      |                                |
| Messor capitatus                | Seeds (BARONI URBANI & NIELSEN 1990)  | Trunk trails (ARNAN & al. 2010), solitary foraging 90% of time (ARNAN & al. 2010)  |                                |
| Messor chamberlini              | Seeds (JOHNSON 2000)  | Solitary foraging, foraging columns (JOHNSON 2000)                                 |                                |
| Messor chicoensis               | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)   |                                |
| Messor ebeninus                 | Seeds (KUNIN 1994)  | Trunk trails (COLL & al. 1987)   |                                |
| Messor galla                    | Seeds (LEVIEUX & DIOMANDE 1978)   | Trunk trails (LEVIEUX & DIOMANDE 1978)   |                                |
| Messor hispanicus               | Seeds (PLOWES & al. 2013)   | Either trunk trails or foraging columns, unclear (AZCARATE & PECO 2003)            |                                |
| Messor julianus                 | Seeds (JOHNSON 2000)  | Trunk trails (JOHNSON 2000)  |                                |
| Messor lariversi                | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)   |                                |
| Messor lobognathus              | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)   |                                |
| Messor minor                    | Seeds (SOLIDA & al. 2010)   | Trunk trails, foraging columns (SOLIDA & al. 2010, PLOWES & al. 2013)              |                                |
| Messor pergandei                | Seeds (JOHNSON 2000)  | Foraging columns (JOHNSON 2000)  |                                |
| Messor regalis                  | Seeds (LEVIEUX & DIOMANDE 1978)   | ?  |                                |
| Messor rufitarsis               | Seeds (HAHN & MASCHWITZ 1980)   | Foraging columns (HAHN & MASCHWITZ 1980)   |                                |
| Messor semirufus                | Seeds (BARONI URBANI 1992)  | ?  |                                |

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|------------------------------------|--|---|---|
| Messor smithi                      | Seeds (JOHNSON 2000)   | Solitary foraging (JOHNSON 2000)  |   |
| Messor stoddardi                   | Seeds (JOHNSON 2000)   | Solitary foraging (JOHNSON 2000)  |   |
| Messor structor                    | Seeds (PLOWES & al. 2013)  | Either trunk trails or foraging columns, unclear (PLOWES & al. 2013)  |   |
| Messor wasmanni                    | Seeds (SOLIDA & al. 2010)  | Trunk trails, foraging columns (HARKNESS & ISHAM 1988) (SOLIDA & al. 2010)  | Polydomous (HARK-<br>NESS & ISHAM 1988)                                 |
| Metapone madagascarica             | Small prey and groups of small prey: termites (HÖLLDOBLER & al. 2002)                        | Solitary foraging, short-term trail or possibly group recruitment (?) (HÖLLDOBLER & al. 2002)   |   |
| Metapone sp.                       | Small prey: termites (HÖLLDOBLER & al. 2002)   | Solitary foraging, short-term trail or possibly group recruitment (?) (HÖLLDOBLER & al. 2002)   |   |
| Monomorium minimum                 | Small prey, dead insects (ADAMS & TRANIELLO 1981), EFN, honeydew (HERBERT & HORN 2008)       | Solitary foraging, short-term trails (ADAMS & TRANIELLO 1981), possibly a long-term trail network (Lanan, personal observation)                 |   |
| Monomorium pharaonis               | Small prey, large prey, dead insects, carrion, EFN, honeydew (NICKERSON & HARRIS 2003)       | Short-term trails (SUMPTER & BEEKMAN 2003) long-term trails, type =? (JACKSON & al. 2006)   | Polydomous and uni-<br>colonial (NICKERSON<br>& HARRIS 2003)            |
| Monomorium sp. rothsteini<br>group | Mostly seeds, some small prey (ANDERSEN & al. 2000)  | Trunk trails (ANDERSEN & al. 2000)  |   |
| Monomorium sydneyense              | ?  | Short-term trails (STRINGER & LESTER 2007)  | Polydomous (STRIN-<br>GER & LESTER 2007)                                |
| Myopopone castanea                 | Small prey: coleopteran larvae (FUMINORI 2010)   | Solitary foraging, probably group recruitment, although they do not describe the role of the scout after excitation at the nest (FUMINORI 2010) |   |
| Myrmecia brevinoda                 | Small prey (HIGASHI & PEETERS 1990)  | Solitary foraging (HIGASHI & PEETERS 1990)  |   |
| Myrmecia comata                    | Small prey (GRAY 1974)   | Solitary foraging (GRAY 1974)   |   |
| Myrmecia croslandi                 | Small prey (GREINER & al. 2007)  | Solitary foraging (GREINER & al. 2007)  |   |
| Myrmecia desertorum                | Small prey, honeydew, floral nectar (GRAY 1971)  | Solitary foraging (GRAY 1971)   |   |
| Myrmecia dispar                    | Small prey, honeydew (GRAY 1971)   | Solitary foraging (GRAY 1971)   |   |
| Myrmecia gulosa                    | Small prey (ROBERTSON 1971)  | Solitary foraging (ROBERTSON 1971)  |   |
| Myrmecia nigriceps                 | Small prey (GREINER & al. 2007)  | Solitary foraging (GREINER & al. 2007)  |   |
| Myrmecia pyriformis                | Small prey (GREINER & al. 2007)  | Solitary foraging (GREINER & al. 2007)  |   |
| Myrmecia tarsata                   | Small prey (GREINER & al. 2007)  | Solitary foraging (GREINER & al. 2007)  |   |
| Myrmecia varians                   | Small prey (GRAY 1974)   | Solitary foraging (GRAY 1974)   |   |
| Myrmecocystus depilis              | Small prey: termites and insects,<br>honeydew (SANDERS & GORDON<br>2003)                     | Solitary foraging, possibly group recruitment (?) (Lanan, personal observation)   |   |
| Myrmecocystus mendax               | Honeydew, nectar (DUNCAN & LIGHTON 1994)   | Solitary foraging, possibly group recruitment (?) (Lanan, personal observation)   |   |
| Myrmecocystus mexicanus            | Small prey, honeydew, nectar<br>(DUNCAN & LIGHTON 1994) fruit<br>(MCCOOK 1882, WHEELER 1908) | Solitary foraging (Lanan, personal observation), maybe group recruitment (?)  |   |
| Myrmecocystus mimicus              | Small prey and groups of small prey: termites, honeydew, floral nectar (HÖLLDOBLER 1981)     | Solitary foraging, group recruitment (HÖLL-DOBLER 1981)   |   |
| Myrmica punctiventris              | Small prey, small and large dead insects (HERBERS & CHOINIERE 1996)                          | Solitary foraging, recruitment, type = ? (HERBERS & CHOINIERE 1996)   | Polydomous (HER-<br>BERS & CHOINIERE<br>1996, BANSCHBACH<br>& al. 1997) |
| Myrmica rubra                      | Small prey: caterpillars and other arthropods (LE ROUX & al. 2002)                           | Trails: type =? (EVERSHED & al. 1981)   |   |

|  |  |  | 1                                   |
|--|--|--|-------------------------------------|
| Myrmica sabuleti                                 | EFN, dead insects, honeydew (DE BISEAU & al. 1997)   | Either group recruitment or short-term trails, called "explosive" because recruitment occurred rapidly. Did not test role of scout in leading group. (DEBISEAU & al. 1997) |                                     |
| Myrmica scabrinodis                              | EFN, brood of other ants (MORON & al. 2008)  | ?  |                                     |
| Myrmicaria brunnea                               | Small prey, honeydew, trophobionts (WRIEDT & al. 2008)   | Long-term trail network or trunk trails "soil trails" (?), short term trails called "temporary trails" (WRIEDT & al. 2008)   |                                     |
| Myrmicaria eumenoides                            | 95% small prey, some honeydew (LEVIEUX 1983)   | Solitary foraging, "hunt in small groups" (?) (LEVIEUX 1983)   |                                     |
| Myrmicaria opaciventris                          | Small prey, large prey, EFN, honeydew (KENNE & DEJEAN 1997)  | Hunt in groups, volatile recruitment (DEJEAN & al. 1999a), long-term trail network that become trenches and eventually tunnels (KENNE & DEJEAN 1999)                       | Polydomous (Kenne & Dejean 1997)    |
| Myrmicocrypta ednaella                           | Wood chips and few dead insects as fungal substrate (MURAKAMI & HIGASHI 1997)                              | Solitary foraging (MURAKAMI & HIGASHI 1997)  |                                     |
| Myrmoteras barbouri                              | Small prey (MOFFETT 1986b)   | Solitary foraging (MOFFETT 1986b)  |                                     |
| Myrmoteras toro                                  | Small prey: springtails (MOFFETT 1986b)  | Solitary foraging (MOFFETT 1986b)  |                                     |
| Mystrium rogeri                                  | Small and large prey: centipedes (HÖLLDOBLER & al. 1998)   | Short-term trail with shaking behavior in nest, scout does not lead recruits (HÖLLDOBLER & al. 1998)   |                                     |
| Neivamyrmex compressinodis                       | Ant nests: <i>Wassmannia</i> (LE BRETON & al. 2007)  | Raiding (LE BRETON & al. 2007)   | Nomadic (LE BRETON & al. 2007)      |
| Neivamyrmex graciellae                           | Ant nests (WATKINS & COODY 1986)   | Raiding (WATKINS & COODY 1986)   | Nomadic (WATKINS & COODY 1986)      |
| Neivamyrmex nigrescens                           | Ant nests (TOPOFF 1975)  | Raiding (TOPOFF 1975)  | Nomadic (TOPOFF 1975)               |
| Neivamyrmex rugulosus                            | Ant nests (LAPOLLA & al. 2002)   | Raiding (LAPOLLA & al. 2002)   | Nomadic (LAPOLLA & al. 2002)        |
| Neivamyrmex texanus                              | Ant nests (HUANG 2010)   | Raiding (HUANG 2010)   | Nomadic (HUANG 2010)                |
| Nesomyrmex echinatinodis                         | ?  | Short-term trails that last about four minutes (STUART & MOFFETT 1994)   | Polydomous, (STUART & MOFFETT 1994) |
| Nesomyrmex spininodis                            | ?  | Short-term trails that last about four minutes (STUART & MOFFETT 1994)   | Polydomous, (STUART & MOFFETT 1994) |
| Nomamyrmex esenbeckii                            | Ant and termite nests (SOUZA & MOURA 2008) (SWARTZ 1998, SANCHEZ-PENA & MUELLER 2002, POWELL & CLARK 2004) | Raiding (SOUZA & MOURA 2008)   | Nomadic (SOUZA & MOURA 2008)        |
| Nothomyrmecia macrops                            | Small prey (HÖLLDOBLER & TAY-<br>LOR 1983)   | Solitary foraging (HÖLLDOBLER & TAYLOR 1983)   |                                     |
| Nylanderia fulva                                 | Small prey, dead insects, honeydew (ANONYMOUS 2010), trophobionts (SHARMA & al. 2013)                      | Long-term trail network (SHARMA & al. 2013), run everywhere, crazy ant (ANONYMOUS 2010)  | Polydomous (SHARMA & al. 2013)      |
| Nylanderia melanderi<br>(Paratrechina melanderi) | ?  | Group recruitment or short-term trails? (LYNCH & al. 1980)   |                                     |
| Nylanderia pubens                                | EFN, honeydew (WETTERER & KEULARTS 2008)   | Large, "loose" trails, most likely long-term trails, run everywhere, crazy ant (MEYERS 2008)   |                                     |
| Ochetellus flavipes                              | Trophobionts in leaf shelters (MORTON & CHRISTIAN 1994)  | Trail network (MORTON & CHRISTIAN 1994)  |                                     |
| Ochetellus glaber                                | Small prey, honeydew (ANONYM-<br>OUS 2013)   | Trails, type = ? (ANONYMOUS 2013)  |                                     |
| Ocymyrmex barbiger                               | Small and large dead insects (MARSH 1985)  | Solitary foraging, group recruitment (MARSH 1985)  |                                     |

| Ocymyrmex robustior   | Dead insects (WEHNER & WEHNER 2011)  | Solitary foraging (WEHNER & WEHNER 2011)   |  |
|---|--|--|--|
| Odontomachus bauri  | Small prey, dead insects (OLI-<br>VEIRA & HÖLLDOBLER 1989)                               | Solitary foraging. Scouts can stimulate more foragers to leave nest but no directional information is communicated (OLIVEIRA & HÖLL-DOBLER 1989) |  |
| Odontomachus brunneus   | Small prey (HART & TSCHINKEL 2012)   | Solitary foraging (HART & TSCHINKEL 2012)  |  |
| Odontomachus chelifer   | Small prey, dead insects (RAIMUNDO & al. 2009)   | Solitary foraging (RAIMUNDO & al. 2009)  |  |
| Odontomachus hastatus   | Small prey (CAMARGO & OLIVEIRA 2012)   | Solitary foraging (CAMARGO & OLIVEIRA 2012)  |  |
| Odontomachus opaciventris   | Small prey (GRONENBERG & EHMER 1996)   | Solitary foraging (GRONENBERG & EHMER 1996)  |  |
| Odontomachus troglodytes  | Small prey (DEJEAN & BASHINGWA 1985)   | Solitary (Dejean & Bashingwa 1985)   |  |
| Oecophylla longinoda  | Mostly honeydew, small prey (DEJEAN & BEUGNON 1991)                                      | Long-term trail network (DEJEAN & BEUGNON 1991)  | Polydomous (DEJEAN & BEUGNON 1991)                                   |
| Oecophylla smaragdina   | Honeydew (COLE & JONES 1948),<br>large and small prey, trophobionts<br>(HÖLLDOBLER 1983) | Long-term trail network (COLE & JONES 1948), short-term trails, volatile recruitment (HÖLL-DOBLER 1983)  | Polydomous (COLE & JONES 1948)                                       |
| Onychomyrmex hedleyi  | Large prey: large centipedes (MI-YATA & al. 2009)  | Raids (MIYATA & al. 2003)  | Nomadic (MIYATA & al. 2003)  |
| Pachycondyla senaarensis<br>(Brachyponera senaarensis,<br>Pachycondyla 6) | Seeds, small prey (DEJEAN & LA-CHAUD 1994)   | Underground trunk trails (DEJEAN & LACHAUD 1994), tandem running (MASHALY & al. 2011)  |  |
| Pachycondyla analis (Mega-<br>ponera foetens, Pachy-<br>condyla 9)        | Termite colonies, groups of termites (LONGHURST & HOWSE 1979)                            | Group raiding (LONGHURST & HOWSE 1979)   | Emigrates like army ants, somewhat nomadic (BAYLISS & FIELDING 2002) |
| Pachycondyla apicalis<br>(Pachycondyla 5)                                 | Small prey, carrion, fruit (FRES-<br>NEAU 1985) (GOSS & al. 1989)                        | Solitary foraging (GOSS & al. 1989), tandem running is used for moving but not foraging (FRESNEAU 1985)  |  |
| Pachycondyla berthoudi<br>(Pachycondyla 9)                                | Small prey: single termites (DUN-CAN 1999)   | Solitary foraging (DUNCAN 1999)  | Polydomy (DUNCAN<br>1999)  |
| Pachycondyla caffraria  | Sugar water (EFN?), small prey (AGBOGBA & HOWSE 1992)                                    | Solitary foraging (AGBOGBA & HOWSE 1992)   |  |
| Pachycondyla chinensis<br>(Pachycondyla 6)                                | Small prey, groups of small prey, dead insects (GUENARD & SILVER-MAN 2011)               | Solitary foraging, social carrying (GUENARD & SILVERMAN 2011)  |  |
| Pachycondyla commutate<br>(Pachycondyla 5)                                | Groups of termites (MILL 1984)   | Group raiding (MILL 1984)  |  |
| Pachycondyla goeldii  | Small prey (ORIVEL & al. 2000)   | Solitary foraging (ORIVEL & al. 2000)  | Polydomous (DENIS & al. 2006)  |
| Pachycondyla havilandi<br>(Hagensia havilandi,<br>Pachycondyla 7)         | Small prey, dead arthropods (DUN-<br>CAN & CREWE 1994a)                                  | Solitary foraging, tandem running (DUNCAN & CREWE 1994a)   |  |
| Pachycondyla marginata<br>(Pachycondyla 5)                                | Groups of termites, termite nests (LEAL & OLIVEIRA 1995)                                 | Group raids (LEAL & OLIVEIRA 1995)   | "Migratory" (ACOSTA-AVALOS & al. 2001)                               |
| Pachycondyla pachyderma   | Small prey: centipedes (DEJEAN & LACHAUD 2011)   | Solitary foraging, tandem running, possibly volatile recruitment (?) (DEJEAN & LACHAUD 2011)   |  |
| Pachycondyla tarsata<br>(Pachycondyla 6)                                  | Small prey: termites, occasionally dead arthropods (LOPEZ & al. 2000)                    | Solitary foraging (LOPEZ & al. 2000)   |  |
| Pachycondyla tesserinoda  | Small prey (MASCHWITZ & STEG-<br>HAUS-KOVAC 1991)  | Solitary foraging, tandem running (JESSEN & MASCHWITZ 1985, 1986)  |  |
| Pachycondyla tridentata   | Small prey (MASCHWITZ & STEG-HAUS-KOVAC 1991)  | Solitary foraging (MASCHWITZ & STEGHAUS-KOVAC 1991)  |  |
|   |  |  |  |

| Pachycondyla villosa<br>(Pachycondyla 5)   | Small prey: termites (DEJEAN & al. 1990)   | Solitary foraging (DEJEAN & al. 1990)   |   |
|--|--|---|---|
| Paraponera clavata                         | EFN (NELSON & al. 1991), small prey (TILLBERG & BREED 2004)  | Solitary foraging, short-term trails without leader, trunk trails (NELSON & al. 1991)   | Polydomous<br>(DAVIDSON 1997)               |
| Paratrechina longicornis                   | Honeydew, EFN, small prey, large prey, dead insects (KENNE & al. 2005)   | Long-term trail network, volatile recruitment, short-term trails (WITTE & al. 2007), run everywhere, crazy ant  | Polydomous, unicolonial (DEBOUT & al 2007)  |
| Pheidole bergi                             | Small prey, seeds (PIRK & al. 2009)  | ?   |   |
| Pheidole ceres                             | Seeds, dead insects, honeydew (JUDD 2005)  | Most likely short-term trails from description (JUDD 2005)  |   |
| Pheidole dentata                           | Small prey, dead insects (CALABI & TRANIELLO 1989)   | Solitary foraging, short-term trails (probably not group recruitment from description) (BURK-HARDT 1998)  |   |
| Pheidole fallax                            | Carrion (ITZKOWITZ & HALEY 1983) other foods?  | Short-term trails (ITZKOWITZ & HALEY 1983)  |   |
| Pheidole gilvescens                        | Seeds (JOHNSON 2000)   | Foraging columns (JOHNSON 2000)   | Polydomous (JOHN-<br>SON 2000)              |
| Pheidole megacephala                       | Small prey, seeds, dead insects, large prey, honeydew (DEJEAN & al. 2007)  | Solitary foraging, either short-term trails or group recruitment (?), volatile recruitment (DEJEAN & al. 2007), long-term trails, type = ? (DUSSUTOUR & al. 2009)             | Polydomous, unicolonial (HOFFMANN 1998)     |
| Pheidole militicida                        | Seeds (HÖLLDOBLER & MÖGLICH 1980)  | Trunk trails (HÖLLDOBLER & MÖGLICH 1980)  |   |
| Pheidole punctulata                        | Honeydew (WAY 1953)  | Long-term trail network (WAY 1953)  |   |
| Pheidole oxyops                            | Large dead insects, carrion (CZACZKES & RATNIEKS 2012)   | Trails with an extremely short decay rate, almost like group recruitment (CZACZKES & RATNIEKS 2012)   |   |
| Pheidole pallidula                         | Small prey, large prey, dead insects (CERDÁ & al. 1998), eliasomes (ESPADALER & GOMEZ 1997), fruit and floral nectar (DETRAIN & DENEUBOURG 1997) | Short-term trails (DETRAIN & PASTEELS 1991)   |   |
| Pheidole rhea                              | Seeds, small prey, dead insects<br>(Lanan, personal observation)   | Very long trunk trails (Lanan, personal observation)  |   |
| Pheidole rugulosa                          | Seeds (WHITFORD & al. 1981)  | Trunk trails (WHITFORD & al. 1981)  |   |
| Pheidole sp. mjobergi group                | Small prey, seeds (ANDERSEN & al. 2000)  | Solitary foraging (ANDERSEN & al. 2000)   |   |
| Pheidole spininodis                        | Seeds (PIRK & al. 2009)  | ?   |   |
| Pheidole titanis                           | Groups of termites, termite nests (FEENER 1988)  | Group raids (FEENER 1988)   |   |
| Pheidole xerophila<br>(Pheidole tucsonica) | Seeds (JOHNSON 2000)   | Trunk trails (WHITFORD & al. 1981) "forage in columns that may extend several meters from the nest" (JOHNSON 2000). Personal observation of trunk trails rather than columns. |   |
| Pheidologeton diversus                     | Small and large prey, carrion, fruits, nuts, bark, leafy plant material, seeds (MOFFETT 1988b)   | Raids and trunk trails (MOFFETT 1988b)  |   |
| Pheidologeton silenus                      | Prey (MOFFETT 1988a)   | Army ant-like swarm raids (MOFFETT 1988a)   |   |
| Philidris sp                               | Honeydew (WIELGOSS & al. 2010)   | Short-term trails to baits, possibly a long-term trail network linking nests which are numerous in trees (?) (WIELGOSS & al. 2010)  | Polydomous (WIEL-GOSS & al. 2010)           |
| Platythyrea conradti                       | Small prey (DEJEAN 2011)   | Solitary foraging (DEJEAN 2011)   |   |
| Platythyrea modesta                        | Small and large prey (DJIETO-LORDON & al. 2001a)   | Solitary foraging, but move entire colony to large prey. Primitive army ant-type behavior? (DJIETO-LORDON & al. 2001a)  | Move frequently (DJIETO-LORDON & al. 2001a) |
| Plectroctena mandibularis                  | Small prey: millipedes (WILKINS & al. 2006)  | Solitary foraging (WILKINS & al. 2006)  |   |

| Pogenomyrmex (Ephebo- myrmex) hackutions   Seeds, dead insects (JOHNSON  | Plectroctena minor                          | Small prey: millipedes and other arthropods (DELEAN & al. 2001) | Solitary foraging, group recruitment (DELEAN & al. 2001) |   |
|--|---|---|--|---|
| Pogonomymex (Ephebonymex) blackhicatus   Seeds, dead insects (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomymex aucustasis   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomymex aucustasis   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)      | Podomyrma laevifrons                        |   | <u>'</u>   |   |
| ### Pagonomyrmex (Ephebo- program) Hunchucamus    Pagonomyrmex (Ephebo- program) Hunchucamus   Pagonomyrmex (Ephebo- program) Hunchucamus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex ancursus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex badius   Seeds (JOHNSON 2000)   Trunk trails (HARRISON & GENTRY 1981)     pagonomyrmex barbatus   Seeds (JOHNSON 2000)   Trunk trails (HARRISON & GENTRY 1981)     pagonomyrmex barbatus   Seeds (JOHNSON 2000)   Seeds (JOHNSON 2000)     Pagonomyrmex barbatus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex barbatus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex barbatus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex contracts   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex contracts   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex contracts   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex contracts   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)     Pagonomyrmex maricopa   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)     Pagonomyrmex maric |   | . , , , , , , , , , , , , , , , , , , ,                         |  |   |
| Pogonomyrmex means   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex badius   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex badius   Seeds (JOHNSON 2000)   Trunk trails (HARRISON & GENTRY 1981)   Pogonomyrmex badius   Seeds (JOHNSON 2000)   Trunk trails (HARRISON & GENTRY 1981)   Pogonomyrmex bicolor   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex bicolor   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex deservorum   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex californicus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex deservorum   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex deservorum   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex deservorum   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex deservorum   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex maricopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex maricopa   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex maricopa   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex subdentatus   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex subdentatus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex subdentatus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex veneral   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex veneral   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   P | myrmex) huachucanus                         |   | serially realigning (comment 2000)                       |   |
| Pogonomymex pache   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)  | Pogonomyrmex (Ephebo-<br>myrmex) laevinodis | ,   | Solitary foraging (JOHNSON 2000)                         |   |
| Pogonomymex barbatus   Seeds (HARRISON & GENTRY 1981), up to 50% insects (JOHNSON 2000)  | Pogonomyrmex anzensis                       | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| up to 50% insects (JOHNSON 2000) Pogonomyrmex birabatus Seeds (GARCIAPEREZ & al. 1994) Pogonomyrmex biolor Pogonomyrmex collifornicus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex comanche Pogonomyrmex comanche Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex desertorum Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex magnecanthus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex magnecanthus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex maricopa Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex maricopa Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex maricopa Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex maricopa Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex nacegelii Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex vaccidentalis Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex sulmus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex sulmus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex terminyinus Seed | Pogonomyrmex apache                         | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| Pogonomyrmex bicolor Pogonomyrmex bicybendensis Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex californicus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex comanche Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex imberbiculus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex imberbiculus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex maricopa Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Trunk trails (MULL & MACMAHON 1997) Pogonomyrmex pima Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Trunk trails (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex sulmins Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex sulmitidus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex sulmitidus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex sulmitidus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex sulmitidus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculus Seeds (JOHNSON 2000) Trunk trails (JOHNSON  | Pogonomyrmex badius                         |   | Trunk trails (HARRISON & GENTRY 1981)                    |   |
| Pogonomyrmex bigbendensis Pogonomyrmex brevispinosius Pogonomyrmex californicus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex comanche Pogonomyrmex comanche Pogonomyrmex comanche Pogonomyrmex desertorum Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex desertorum Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex miderbiculus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex magnacanthus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex maricopa Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex montanus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex naegelli Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex naegelli Seeds (JOHNSON 2000) Trunk trails (MULL & MACMAHON 1997) Pogonomyrmex sulmus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex sulmus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex sulmus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex sulmus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex sulmus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex sulmus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex sulmus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex terunispinus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pog | Pogonomyrmex barbatus                       | Seeds (GARCIAPEREZ & al. 1994)                                  | Trunk trails (GARCIAPEREZ & al. 1994)                    |   |
| Pogonomyrmex brevispinosus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   | Pogonomyrmex bicolor                        | Seeds (JOHNSON 2000)  | Trunk trail (JOHNSON 2000)                               |   |
| Pogonomyrmex californicus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex desertorum Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex magnacanthus Pogonomyrmex magnacanthus Pogonomyrmex magnacanthus Pogonomyrmex magnacanthus Pogonomyrmex magnacanthus Pogonomyrmex manicopa Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex magnacanthus Pogonomyrmex manicopa Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex naegelii Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex prima Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Trunk trails (MULL & MACMAHON 1997) Pogonomyrmex prima Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex suldentatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex suldentatus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex texanus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex texanus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex texanus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex texanus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex texanus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex texanus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex texanus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex texanus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex texanus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex texanus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pog | Pogonomyrmex bigbendensis                   | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| 2000    Solitary foraging (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex desertorum   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex magnacanthus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex marcicopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex marcicopa   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex montanus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex montanus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex naegelii   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex occidentalis   Seeds (JOHNSON 2000)   Trunk trails (MULL & MACMAHON 1997)   Pogonomyrmex pima   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex subtinus   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex subtentanus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex subtentanus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex subtentanus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex subtentiatus   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex subtentiatus   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex texanus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   Pogonomyrmex texanus   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex texanus   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex wheeleri   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex wheeleri   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex wheeleri   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex wheeleri   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex wheeleri   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Pogonomyrmex wheeleri   Seeds (JOHNSON 2000)   Pogonomyrmex wheeleri   Seeds (JOHNSON 2000)   Pogonomyrmex whe   | Pogonomyrmex brevispinosus                  | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| Pogonomyrmex deseriorum Pogonomyrmex imberbiculus Pogonomyrmex magnacanthus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex maricopa Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex montanus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex montanus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex naegelii Seeds, dead insects, plant parts (BELCHIOR & al. 2012) Pogonomyrmex occidentalis Pogonomyrmex occidentalis Seeds (JOHNSON 2000) Trunk trails (MULL & MACMAHON 1997) Pogonomyrmex rugosus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex salinus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex salinus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex subdentatus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex submitidus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex textunus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex textunus Seeds (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex textunus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Solitary foraging (JOHNSON 2000) Pogonomyrmex vermiculatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Pogonomyrmex vermiculatus Seeds (JOHNSON 2000) Trunk trails (JOHNSON 2000) Polyrhachis arachne Trophobionts, dead insects (LIEFKE & al. 1998) LIEFKE & al. 1998) Polyrhachis furcata dead insects (LIEFKE & al. 1998) Solitary foraging (TORRES-CONTRERAS & al. 2001) Polyrhachis furcata Coroup recruitment (LIEFKE & al. 1998), bort-term trails (LIEFKE & al. 1998), LIEFKE & al. 1998) Polyrhachis furcata dead insects (LIEFKE & al. 1998) Solot-term trails (LIEFKE & al. 1998), LIEFKE & al. 1998) CliefKE & al. 1998) Polyrhachis furcata dead insects (LIEFK | Pogonomyrmex californicus                   | Seeds (DEVITA 1979)   |  |   |
| Pogonomyrmex imberbiculus   Seeds (Johnson 2000)   Solitary foraging (Johnson 2000)   Solitary foraging (Johnson 2000)   | Pogonomyrmex comanche                       | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| Pogonomyrmex magnacanthus   Seeds (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)  | Pogonomyrmex desertorum                     | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| Seeds (JOHNSON 2000)   Solitary foraging, foraging columns (JOHNSON 2000)  | Pogonomyrmex imberbiculus                   | Seeds, dead insects (JOHNSON 2000)                              | Solitary foraging (JOHNSON 2000)                         |   |
| 2000    Solitary foraging (JOHNSON 2000)   Solitary foraging (BELCHOR & al. 2012)  | Pogonomyrmex magnacanthus                   | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| Pogonomyrmex naegelii   Seeds, dead insects, plant parts (BELCHIOR & al. 2012)   Trunk trails (MULL & MACMAHON 1997)   | Pogonomyrmex maricopa                       | Seeds (JOHNSON 2000)  |  |   |
| BELCHOR & al. 2012   Seeds (JOHNSON 2000)   Trunk trails (MULL & MACMAHON 1997)  | Pogonomyrmex montanus                       | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| Pogonomyrmex pima   Seeds, dead insects (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)  | Pogonomyrmex naegelii                       | Seeds, dead insects, plant parts (BELCHIOR & al. 2012)          | Solitary foraging (BELCHIOR & al. 2012)                  |   |
| Pogonomyrmex rugosus   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)  | Pogonomyrmex occidentalis                   | Seeds (JOHNSON 2000)  | Trunk trails (MULL & MACMAHON 1997)                      |   |
| Pogonomyrmex salinus   Seeds (JOHNSON 2000)   Trunk trails (JOHNSON 2000)   Solitary foraging (JOHNSON 2000)   | Pogonomyrmex pima                           | Seeds, dead insects (JOHNSON 2000)                              | Solitary foraging (JOHNSON 2000)                         |   |
| Pogonomyrmex snellingiSeeds (JOHNSON 2000)Solitary foraging (JOHNSON 2000)Pogonomyrmex subdentatusSeeds (JOHNSON 2000)Trunk trails (JOHNSON 2000)Pogonomyrmex subnitidusSeeds (JOHNSON 2000)Trunk trails (JOHNSON 2000)Pogonomyrmex tenuispinusSeeds (JOHNSON 2000)Solitary foraging (JOHNSON 2000)Pogonomyrmex texanusSeeds (JOHNSON 2000)Solitary foraging (JOHNSON 2000)Pogonomyrmex vermiculatusSeeds (TORRES-CONTRERAS & al. 2007)Solitary foraging (TORRES-CONTRERAS & al. 2007)Pogonomyrmex wheeleriSeeds (JOHNSON 2000)Trunk trails (JOHNSON 2000)Polyrhachis arachneTrophobionts, dead insects (LIEFKE & al. 2001)Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)Polydomous (LIEFKE & al. 1998)Polyrhachis bicolorFruit, sap, small prey, dead insects (LIEFKE & al. 1998)Long-term trails, type=? (LIEFKE & al. 1998), short-term trails (LIEFKE & al. 2001)Polydomous (LIEFKE & al. 1998)Polyrhachis divesTrophobionts, small prey, dead insects (LIEFKE & al. 1998)Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)Polydomous, territorial (LIEFKE & al. 1998), LIEFKE & al. 1998)Polyrhachis furcataTrophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)Polydomous, territorial (LIEFKE & al. 1998)Polyrhachis illaudataHoneydew, EFN, dead insectsGroup recruitment, short-term trails (LIEFKE & Polydomous (LIEFKE & al. 1998)  | Pogonomyrmex rugosus                        | Seeds (JOHNSON 2000)  | Trunk trails (JOHNSON 2000)                              |   |
| Pogonomyrmex subdentatus         Seeds (JOHNSON 2000)         Solitary foraging (JOHNSON 2000)           Pogonomyrmex subnitidus         Seeds (JOHNSON 2000)         Trunk trails (JOHNSON 2000)           Pogonomyrmex tenuispinus         Seeds (JOHNSON 2000)         Trunk trails (JOHNSON 2000)           Pogonomyrmex texanus         Seeds (JOHNSON 2000)         Solitary foraging (JOHNSON 2000)           Pogonomyrmex vermiculatus         Seeds (JOHNSON 2000)         Solitary foraging (TORRES-CONTRERAS & al. 2007)           Pogonomyrmex wheeleri         Seeds (JOHNSON 2000)         Trunk trails (JOHNSON 2000)           Polyrhachis arachne         Trophobionts, dead insects (LIEFKE & al. 1998)         Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998, LIEFKE & al. 1998)           Polyrhachis bellicosa         Trophobionts EFN, small prey, dead insects (LIEFKE & al. 1998)         Long-term trails, type=? (LIEFKE & al. 1998), short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)           Polyrhachis dives         Trophobionts, small prey, dead insects (LIEFKE & al. 1998)         Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)         Polydomous, territorial (LIEFKE & al. 1998)           Polyrhachis furcata         Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)         Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)         Polydomous, t  | Pogonomyrmex salinus                        | Seeds (JOHNSON 2000)  | Trunk trails (JOHNSON 2000)                              |   |
| Pogonomyrmex subnitidus         Seeds (JOHNSON 2000)         Trunk trails (JOHNSON 2000)           Pogonomyrmex tenuispinus         Seeds (JOHNSON 2000)         Trunk trails (JOHNSON 2000)           Pogonomyrmex texanus         Seeds (JOHNSON 2000)         Solitary foraging (JOHNSON 2000)           Pogonomyrmex vermiculatus         Seeds (TORRES-CONTRERAS & al. 2007)         Solitary foraging (TORRES-CONTRERAS & al. 2007)           Pogonomyrmex wheeleri         Seeds (JOHNSON 2000)         Trunk trails (JOHNSON 2000)           Polyrhachis arachne         Trophobionts, dead insects (LIEFKE & al. 1998)         Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998, LIEFKE & al. 1998)         Polydomous (LIEFKE & al. 1998)           Polyrhachis bellicosa         Trophobionts EFN, small prey, dead insects (LIEFKE & al. 1998)         Group recruitment (LIEFKE & al. 1998), short-term trails (LIEFKE & al.  | Pogonomyrmex snellingi                      | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| Pogonomyrmex tenuispinus  Seeds (JOHNSON 2000)  Pogonomyrmex texanus  Seeds (JOHNSON 2000)  Solitary foraging (JOHNSON 2000)  Pogonomyrmex vermiculatus  Seeds (TORRES-CONTRERAS & al. 2007)  Pogonomyrmex wheeleri  Polyrhachis arachne  Trophobionts, dead insects (LIEFKE & al. 1998)  Polyrhachis bellicosa  Trophobionts EFN, small prey, dead insects (LIEFKE & al. 2001)  Truit, sap, small prey, dead insects (LIEFKE & al. 1998), short-term trails (L | Pogonomyrmex subdentatus                    | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| Pogonomyrmex texanus  Seeds (JOHNSON 2000)  Solitary foraging (JOHNSON 2000)  Solitary foraging (JOHNSON 2000)  Pogonomyrmex vermiculatus  Seeds (TORRES-CONTRERAS & al. 2007)  Pogonomyrmex wheeleri  Seeds (JOHNSON 2000)  Trunk trails (JOHNSON 2000)  Polyrhachis arachne  Trophobionts, dead insects (LIEFKE & al. 1998, LIEFKE & al. 1998, LIEFKE & al. 1998)  Polyrhachis bellicosa  Trophobionts EFN, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis bicolor  Fruit, sap, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis dives  Trophobionts, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis dives  Trophobionts, small prey, dead insects (LIEFKE & al. 1998)  Trophobionts, small prey, dead insects (LIEFKE & al. 1998)  Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)  Polyrhachis furcata  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis furcata  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Short-term trails (LIEFKE & al. 1998, LIEFKE & Polydomous, territorial (LIEFKE & al. 1998)  Polyrhachis illaudata  Honeydew, EFN, dead insects  Group recruitment (LIEFKE & al. 1998, LIEFKE & Polydomous, territorial (LIEFKE & al. 1998)  Polyrhachis illaudata  Honeydew, EFN, dead insects  Group recruitment, short-term trails (LIEFKE & Polydomous (LIEFKE & al. 1998)   | Pogonomyrmex subnitidus                     | Seeds (JOHNSON 2000)  | Trunk trails (JOHNSON 2000)                              |   |
| Pogonomyrmex vermiculatus Seeds (TORRES-CONTRERAS & al. 2007)  Pogonomyrmex wheeleri Seeds (JOHNSON 2000)  Trunk trails (JOHNSON 2000)  Polyrhachis arachne Trophobionts, dead insects (LIEFKE & al. 1998, LIEFKE & al. 1998, LIEFKE & al. 1998)  Polyrhachis bellicosa Trophobionts EFN, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis bicolor Fruit, sap, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis dives Trophobionts, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis furcata Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Short-term trails (LIEFKE & al. 1998), short-term trails (LIEFKE & al. 19 | Pogonomyrmex tenuispinus                    | Seeds (JOHNSON 2000)  | Trunk trails (JOHNSON 2000)                              |   |
| 2007)  Pogonomyrmex wheeleri Seeds (JOHNSON 2000)  Trunk trails (JOHNSON 2000)  Trunk trails (LIEFKE & al. 1998, LIEFKE & al. 1998, LIEFKE & al. 1998)  Polyrhachis arachne  Trophobionts, dead insects (LIEFKE & al. 2001)  Polyrhachis bellicosa Trophobionts EFN, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis bicolor  Fruit, sap, small prey, dead insects (LIEFKE & al. 1998)  Fruit, sap, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis dives Trophobionts, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis furcata Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis furcata Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis illaudata Honeydew, EFN, dead insects  Group recruitment (LIEFKE & al. 1998, LIEFKE & polydomous, territorial (LIEFKE & al. 1998)  Short-term trails (LIEFKE & al. 1998, LIEFKE & polydomous, territorial (LIEFKE & al. 1998)  Polyrhachis illaudata  Honeydew, EFN, dead insects Group recruitment, short-term trails (LIEFKE & Polydomous (LIEFKE & Polydomous)  Polydomous (LIEFKE & Polydomous)   | Pogonomyrmex texanus                        | Seeds (JOHNSON 2000)  | Solitary foraging (JOHNSON 2000)                         |   |
| Polyrhachis arachne Trophobionts, dead insects (LIEFKE & al. 1998)  Polyrhachis bellicosa Trophobionts EFN, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis bicolor  Fruit, sap, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis dives Trophobionts, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis furcata Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)  Polyrhachis furcata Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis furcata Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998, LIEFKE & al. 1998, LIEFKE & al. 1998)  Polyrhachis illaudata Honeydew, EFN, dead insects  Group recruitment, short-term trails (LIEFKE & Polydomous (LIEFKE & P | Pogonomyrmex vermiculatus                   |   |  |   |
| ### Rollythachis bellicosa   Congression of the polythachis   Congress | Pogonomyrmex wheeleri                       | Seeds (JOHNSON 2000)  | Trunk trails (JOHNSON 2000)                              |   |
| insects (LIEFKE & al. 1998)  LIEFKE & al. 2001)  Rolyrhachis bicolor  Fruit, sap, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis dives  Trophobionts, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis furcata  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis furcata  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)  Polyrhachis illaudata  Honeydew, EFN, dead insects  Group recruitment (LIEFKE & al. 1998), short-term trails (LIEFKE & al. 1998), short-term trails (LIEFKE & al. 1998)  Polyrhachis furcata  Group recruitment (LIEFKE & al. 1998), short-term trails (LIEFKE & al. 1998)  Polydomous, territorial (LIEFKE & al. 1998)  Polydomous, territorial (LIEFKE & al. 1998)   | Polyrhachis arachne                         |   |  | ,   |
| (LIEFKE & al. 1998)  Polyrhachis dives  Trophobionts, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis furcata  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)  Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)  Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998, LIEFKE & al. 1998)  Polyrhachis illaudata  Honeydew, EFN, dead insects  Group recruitment, short-term trails (LIEFKE & Polydomous (LI | Polyrhachis bellicosa                       |   |  | Polydomous (LIEFKE & al. 1998)              |
| sects (LIEFKE & al. 1998)  Polyrhachis furcata  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Polyrhachis illaudata  Trophobionts, EFN, small prey, dead insects (LIEFKE & al. 1998)  Short-term trails (LIEFKE & al. 1998, LIEFKE & al. 1998)  CIEFKE & al. 1998)  Polyrhachis illaudata  Honeydew, EFN, dead insects  Group recruitment, short-term trails (LIEFKE & Polydomous (LIEFKE   | Polyrhachis bicolor                         |   |  | Polydomous (LIEFKE & al. 1998)              |
| dead insects (LIEFKE & al. 1998) al. 2001) (LIEFKE & al. 1998)  Polyrhachis illaudata Honeydew, EFN, dead insects Group recruitment, short-term trails (LIEFKE & Polydomous (LIEFKE  | Polyrhachis dives                           |   |  | Polydomous, territorial (LIEFKE & al. 1998) |
|  | Polyrhachis furcata                         |   |  | Polydomous, territorial (LIEFKE & al. 1998) |
|  | Polyrhachis illaudata                       |   |  | Polydomous (LIEFKE & al. 1998)              |

| Polyrhachis laboriosa                             | Small prey (DEJEAN & al. 1994b),<br>EFN, honeydew (MERCIER & LE-<br>NOIR 1999)  | Solitary foraging, group recruitment (DEJEAN & al. 1994b)  |   |
|---|---|--|---|
| Polyrhachis lacteipennis<br>(Polyrhachis simplex) | Honeydew (DEGEN & al. 1986,<br>GERSANI & DEGEN 1988) floral<br>nectar, small prey: flies, dead in-<br>sects (OFER 1970) | "Long, crowded columns" to aphids on trees (OFER 1970)   |   |
| Polyrhachis muelleri                              | EFN, dead insects (LIEFKE & al. 1998)   | Group recruitment, short-term trails (LIEFKE & al. 1998, LIEFKE & al. 2001)  | Polydomous (LIEFKE & al. 1998)                                      |
| Polyrhachis nigropilosa                           | Sugary sap, dead insects (LIEFKE & al. 1998)  | Group recruitment (LIEFKE & al. 1998, LIEFKE & al. 2001)   | Polydomous (LIEFKE & al. 1998)                                      |
| Polyrhachis olybria                               | ?   | Short-term trails (LIEFKE & al. 2001)  |   |
| Polyrhachis proxima                               | Honeydew, dead insects (LIEFKE & al. 1998)  | Tandem running (LIEFKE & al. 1998, LIEFKE & al. 2001)  | Polydomous (LIEFKE & al. 1998)                                      |
| Polyrhachis schellerichae                         | Trophobionts, small prey, dead insects (LIEFKE & al. 1998)  | Group recruitment, cryptic trails: short-term? (LIEFKE & al. 1998, LIEFKE & al. 2001)  | Polydomous (LIEFKE & al. 1998)                                      |
| Polyrhachis vicina                                | Honeydew, EFN, small prey (WANG & TANG 1994)  | Long-term trails, type = ? (WANG & TANG 1994)  | Polydomous (WANG & TANG 1994)                                       |
| Ponera pennsylvanica                              | Small prey (PRATT & al. 1994)   | Solitary foraging, tandem running (PRATT & al. 1994)   |   |
| Prenolepis imparis                                | Fruit, small prey, dead insects (TALBOT 1943), honeydew (Lanan, personal observation)                                   | Solitary foraging, short-term trails (TALBOT 1943)   |   |
| Prionopelta amabilis                              | Small prey: diplurans (HÖLLDOB-<br>LER & WILSON 1986)   | Solitary foraging, recruitment by scout shaking in nest and trail pheromone, unclear whether group recruitment or short-term trails (?) (HÖLLDOBLER & WILSON 1986) | Polydomous (HÖLL-<br>DOBLER & WILSON<br>1986)                       |
| Pristomyrmex punctatus<br>(Pristomyrmex pungens)  | Honeydew (TSUJI & ITO 1986,<br>KANEKO 2003)   | Trailsprobably either long-term trail networks or trunk trails (?) (TSUJI 1988)  | Polydomous (TSUJI<br>1988)  |
| Proatta butteli                                   | Small prey, large prey, dead insects (MOFFETT 1986a)  | Solitary foraging, short-term trails (could be induced without a scout) (MOFFETT 1986a)  |   |
| Probolomyrmex dammermani                          | Small prey: millipedes (ITO 1998)   | Solitary foraging (ITO 1998)   |   |
| Proformica longiseta                              | Floral nectar, dead insects (FERNAN-<br>DEZ-ESCUDERO & TINAUT 1999)   | Solitary foraging (FERNANDEZ-ESCUDERO & TINAUT 1999)   | Polydomous (FER-<br>NANDEZ-ESCUDERO<br>& al. 2001)                  |
| Psalidomyrmex procerus                            | Small prey: earthworms (DEJEAN & al. 1999b)   | Solitary foraging (DEJEAN & al. 1999b)   |   |
| Pseudolasius sp.                                  | Trophobionts (MALSCH & al. 2001)  | ?  | Polydomous (MALSCH & al. 2001)                                      |
| Pseudomyrmex termitarius                          | Small prey (JAFFE & al. 1986)   | Solitary foraging (JAFFE & al. 1986)   | Territorial (JAFFE & al. 1986)                                      |
| Rhytidoponera aurata                              | Dead insects (NIELSEN 2001)   | Solitary foraging (NIELSEN 2001)   |   |
| Rhytidoponera metallica                           | Eliasomes (HUGHES & WESTOBY 1992), small prey (THOMAS & FRAMENAU 2005)  | Solitary foraging (THOMAS & FRAMENAU 2005)   |   |
| Rhytidoponera violacea                            | Small prey, seeds (LUBERTAZZI & al. 2010)   | ?  |   |
| Simopelta oculata                                 | Ant nests: brood (GOTWALD & BROWN 1966)   | Raiding (GOTWALD & BROWN 1966)   | Nomadic (GOTWALD & BROWN 1966)                                      |
| Solenopsis geminata                               | Seeds (CARROLL & RISCH 1984),<br>small prey (RISCH & CARROLL<br>1982), EFN, honeydew (LANZA &<br>al. 1993)              | Trails, type = ? (JAFFE & PUCHE 1984)  | Polydomous (PER-<br>FECTO 1994)                                     |
| Solenopsis invicta<br>(Solenopsis wagneri)        | Dead insects, carrion, EFN, honeydew (TENNANT & PORTER 1991)  | Long-term subterranean trails (ZAKHAROV & TOMPSON 1998), short-term trails (?)   | Polydomous (ZA-<br>KHAROV & TOMPSON<br>1998) (DEBOUT & al.<br>2007) |

| Solenopsis xyloni                                 | Dead insects, seeds, EFN (Lanan, pers. obs.)   | Solitary, short-term trails, long-term subterra-<br>nean trails (Lanan, personal observation)  | Probably polydomous (Lanan, personal observation) |
|---|--|--|---|
| Stegomyrmex vizottoi                              | Millipede eggs   | Solitary foraging (DINIZ & BRANDÃO 1993)   |   |
| Stigmatomma pallipes<br>(Amblyopone pallipes)     | Small prey: centipedes (HASKINS 1928, TRANIELLO 1982)  | Solitary foraging (TRANIELLO 1978)   |   |
| Stigmatomma pluto<br>(Amblyopone pluto)           | Small prey: centipedes (THORNE & TRANIELLO 2003), chilopods (GOTWALD & LEVIEUX 1972)   | Solitary foraging (GOTWALD & LEVIEUX 1972)   |   |
| Stigmatomma reclinatum<br>(Amblyopone reclinata)  | Small prey: centipedes (BILLEN & al. 2005)   | Solitary foraging, short-term trail recruitment, small groups are apparently not led by the scout but follow trail pheromone (BILLEN & al. 2005) |   |
| Stigmatomma silvestrii<br>(Amblyopone silvestrii) | Small prey: centipedes (MASUKO 1993)   | Solitary foraging (MASUKO 1993)  |   |
| Strumigenys lujae<br>(Serrastruma lujae)          | Small prey: collembola (DEJEAN & BENHAMOU 1993)  | Solitary foraging (DEJEAN & BENHAMOU 1993)   |   |
| Strumigenys rufobrunea                            | Small prey (DEJEAN 1986)   | Solitary (DEJEAN 1986)   |   |
| Tapinoma erraticum                                | Honeydew, EFN (MARTINEZ & al. 2011)  | Trails, type = ? (MARTINEZ & al. 2011)   |   |
| Tapinoma nigerrimum                               | Small prey, large prey, dead insects (CERDÁ & al. 1998), eliasomes (ESPADALER & GOMEZ 1997), honeydew (OUDENHOVE & al. 2011) | Likely long-term trail network, many polydomous nests are interconnected by aboveground trails (OUDENHOVE & al. 2011)                            | Polydomous (OUDEN-HOVE & al. 2011)                |
| Tapinoma sessile                                  | Honeydew, dead insects, small prey (BUCZKOWSKI & BENNETT 2008b)  | Long-term trail network (BUCZKOWSKI & BENNETT 2008b)   | Polydomous (BUCZ-<br>KOWSKI & BENNETT<br>2008b)   |
| Tapinoma simrothi                                 | Honeydew (DARTIGUES 1992)  | Long-term trails, type = ? (SIMON & HEFETZ 1991)   |   |
| Technomyrmex albipes                              | EFN, honeydew (LACH & al. 2010)  | Trails linking nests in bamboo, likely a long-term trail network (TSUJI & YAMAUCHI 1994)   | Polydomous (TSUJI & YAMAUCHI 1994)                |
| Temnothorax albipennis                            | Small prey (DORNHAUS 2008)   | Solitary foraging, tandem running (FRANKS & al. 2010)  |   |
| Temnothorax rugatulus                             | Small prey: collembola (BENGSTON & DORNHAUS 2013)  | Solitary foraging, tandem running (BENGSTON & DORNHAUS 2013)   |   |
| Tetramorium aculeatum                             | Small prey (DJIETO-LORDON & al. 2001b), honeydew (CAMPBELL 1994)   | Solitary foraging, volatile recruitment (DJIETO-LORDON & al. 2001b)  | Polydomous (DEJEAN & al. 1994a)                   |
| Tetramorium bicarinata                            | Honeydew, small prey, dead insects (MARTINEZ & WEIS 2011)  | Group recruitment (DEBISEAU & al. 1994)  | polydomous (MAR-<br>TINEZ & WEIS 2011)            |
| Tetramorium caespitum                             | Seeds, small prey (BRAIN & al. 1967), honeydew, EFN (KATA-YAMA & SUZUKI 2003)  | Group recruitment, short-term trail recruitment (COLLIGNON & DETRAIN 2010)   | Polydomous (STEINER & al. 2003)                   |
| Tetramorium impurum                               | ?  | Group recruitment (VERHAEGHE 1982)   |   |
| Tetramorium semilaeve                             | Small prey, large prey, dead insects (CERDÁ & al. 1998)  | Recruitment, type =? (CERDÁ & al. 1998)  |   |
| Tetramorium tsushimae                             | Honeydew (KATAYAMA & SUZUKI<br>2010), seeds (SANADA-MORIMURA<br>& al. 2006), small prey (YAGI &<br>HASEGAWA 2011)            | ?  | Polydomous (SANA-<br>DA-MORIMURA & al.<br>2006)   |
| Tetraponera PSW-80                                | Trophobionts, dead insects (BU-SCHINGER & al. 1994)  | Trails, type = ? (BUSCHINGER & al. 1994)   | Polydomous (BU-<br>SCHINGER & al. 1994)           |
| Thaumatomyrmex contumax                           | Small prey: millipedes (BRANDÃO & al. 1991)  | Solitary foraging (BRANDÃO & al. 1991)   |   |
| Trachymyrmex turrifex                             | Detritus, frass (WALLER 1989a)   | Solitary foraging (WALLER 1989a)   |   |
| Wasmannia auropunctata                            | Small prey, honeydew (FABRES & BROWN 1978)   | long-term trail network (HOWARD & al. 1982)  | Polydomous, unicolonial (VONSHAK & al. 2009)      |

**Table S2:** Data, citations, and justifications for the analysis shown in Figure 4. Note that "—" in the column for polydomy and nomadism should be interpreted as no reports in the literature, rather than a positive report of monodomy.

| Species                    | Food resource    | Foraging strategy | Polydomy,<br>nomadism | a      | ıce          | Depletability | Frequency | Notes/justification   |
|----------------------------|------------------|-------------------|-----------------------|--------|--------------|---------------|-----------|---|
| Acanthognathus<br>rudis    | Small prey       | Solitary          | -                     | 1 Size | ? Space      | <b>1</b>      | . Fre     | Recruitment: Solitary, frequently catch collembola and other small prey (GRONENBERG & al. 1998).  Size: Small, can be retrieved by one ant.  Space: ?   |
|                            |                  |                   |                       |        |              |               |           | <b>Depletability:</b> Small colonies, therefore unlikely to deplete prey. <b>Frequency:</b> ?   |
| Acromyrmex<br>coronatus    | Leaves           | Trunk trail       | -                     | 1      | 1<br>or<br>2 | ?             | 1         | Recruitment: Collects a variety of small herbs, grass and ferns across the forest floor, have trunk trails that are partly underground (WETTERER 1995).  Size: small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: The small plants used are likely to be more distributed in space than trees in this habitat based on the description (WETTERER 1995).  Depletability: ?  Frequency: continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout.                  |
| Acromyrmex<br>fracticornis | Leaves:<br>grass | Solitary          | -                     | 1      | 1            | 2             | 1         | Recruitment: Solitary, selects young, tender blades of grass (FOWLER & ROBINSON 1977).  Size: small, retrieved by single workers.  Depletability: New tender grass shoots are constantly growing. However, they do mention that the ants can prevent seeded grass from growing and can increase weeds in rangeland. This might be due to interaction with grazing cattle (FOWLER & ROBINSON 1977).  Frequency: Continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout. Grass is common in environment (FOWLER & ROBINSON 1977).   |
| Acromyrmex heyeri          | Leaves:<br>grass | Trunk trails      | -                     | 1      | 1            | 1             | 1         | Recruitment: Trunk trails (BOLLAZZI & ROCES 2011).  Size: small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Grassland ant, suitable grass is likely to be present throughout foraging area (BOLLAZZI & ROCES 2011).  Depletability: Grass cutting ceased before the available grass was exhausted, due to temperature limitation (BOLLAZZI & ROCES 2011).  Frequency: Continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout. Grass is common in environment. |
| Acromyrmex<br>lobicornis   | Leaves           | Trunk trail       | -                     | 1      | 2            | 2             | 1         | Recruitment: 3- to 7-dendritic, branching trunk trails (ELIZALDE & FARJI-BERNER 2012).  Size: Small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Colonies show a preference for certain trees, suggesting patchiness (PEREZ & al. 2011).  Depletability: These ants can defoliate whole trees (PEREZ & al. 2011), leaves will presumably grow back over time.  Frequency: Continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout.                              |
| Acromyrmex lundi           | Leaves           | Trunk trail       | _                     | 1      | 2            | ?             | 1         | Recruitment: Trunk trails (FOWLER 1988).  Size: Small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Lives in woodland patches on a savanna, where it cuts leaves only from broad-leaf woody plants around the nest (FOWLER 1988).  Depletability: ?  Frequency: Continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout. Such plants are apparently in dense stands around nest sites (FOWLER 1988).   |

| Acromyrmex lundi           | Mushrooms  | Trunk trail            | -       | 2            | ? | 2       | 3            | Recruitment: Trunk trails (FOWLER 1988).  Size: Large mushrooms, cut into small pieces (LECHNER & JOSENS 2012).  Space: Medium, numerous ants were involved in retrieving pieces of the mushrooms, and the collective effort of many ants was necessary to cut up the mushroom tissue (LECHNER & JOSENS 2012).  Depletability: Unlikely that harvesting the mushrooms would change occurrence of next mushroom.  Frequency: The ants took several days to intensively harvest the mushrooms. This is an uncommon food source and was not replenished once gone (LECHNER & JOSENS 2012).   |
|----------------------------|------------|------------------------|---------|--------------|---|---------|--------------|---|
| Acromyrmex<br>octospinosus | Detritus   | Trunk trail            | _       | 1            | 1 | 1       | 1<br>or<br>2 | Recruitment: Trunk trails. Size: Small, can be retrieved by single ants. Space: Frass and other debris fall from canopy, therefore likely to be dispersed in space (WETTERER & al. 1998). Depletability: Unlikely to be depleted, as new material falls from above. Frequency: ?  |
| Acromyrmex<br>octospinosus | Leaves     | Trunk trail            | -       | 1            | 1 | ?       | 1            | Recruitment: Trunk trails (WETTERER & al. 1998).  Size: Small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Forages on leaves of small plants, fallen leaves and fruit, detritus, insect frass but not large trees (WETTERER & al. 1998).  Depletability: ?  Frequency: Leaves are continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout.  |
| Acromyrmex<br>versicolor   | Leaves     | Trunk trail            | _       | 1            | 2 | 2 or 3  | 1            | Recruitment: Trunk trails (Lanan, personal observation).  Size: Small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Plants are patchily distributed, as are areas with fallen leaves or petals that the ants collect (Lanan, personal observation).  Depletability: In a natural setting the ants rarely defoliate a whole plant before moving on to a different area. (The behavior is different in a vegetable garden where they kill entire plants) (Lanan, personal observation).  Frequency: Continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout. Preferred plants are fairly common in the desert, as are patches of fallen leaves or fallen flowers such as ocotillo flowers (Lanan, personal observation). |
| Aenictus gracilis          | Ant nest   | Raid                   | Nomadic | 2<br>or<br>3 | ? | ?       | 2<br>or<br>3 | Recruitment: Raids, mainly attack arboreal ant nests with large colonies, from which they take both adults and brood (HIROSAWA & al. 2000).  Size: Attack large arboreal ant nests. (HIROSAWA & al. 2000)  Space:.?  Depletability: ? not measured.  Frequency: Large ant nests are not as common as small nests and may require some searching before the next raid finds one.   |
| Aenictus laeviceps         | Ant nest   | Raid                   | Nomadic | 2            | ? | or<br>3 | 2            | Recruitment: Raiding. Size: Medium, mostly attack ground dwelling ant nests with small or medium colonies from which they take adults and brood. Space: ? Depletability: The authors demonstrate that the resource is depletable. They measure a significant decrease in the number of colonies found after raids (HIROSAWA & al. 2000) Frequency: Small or medium ant nests in the rainforest litter are fairly common, so it's likely that raids will find new sources on subsequent foraging bouts before the colony moves.  |
| Amblyopone<br>australis    | Large prey | Group re-<br>cruitment | _       | 2            | ? | 1       | ?            | Recruitment: Describe group recruitment with a scout for larger prey, mostly centipedes (HÖLLDOBLER & PALMER 1989).  Size: Medium, multiple workers needed to retrieve prey (HÖLLDOBLER & PALMER 1989).  Space: Forage and nest within rotten logs, where the nests are dispersed in many chambers throughout. From the description, it sounds like prey are more dispersed than patchy within the log (PEETERS & MOLET 2010).  Depletability: The colony is very small, so prey is unlikely to be depleted (PEETERS & MOLET 2010).  Frequency: ?   |

| Amblyopone<br>australis     | Small prey         | Solitary                  | -          | 1            | or<br>2 | 1 | ?            | Recruitment: Solitary collection of small prey (HÖLLDOBLER & PALMER 1989).  Size: Small, can be retrieved by one ant.  Space: Forage and nest within rotten logs, where the nests are dispersed in many chambers throughout. From the description, it sounds like prey are more dispersed than patchy within the log (PEETERS & MOLET 2010).  Depletability: The colony is small, so prey is probably not depleted (PEETERS & MOLET 2010).  Frequency: ?  |
|-----------------------------|--------------------|---------------------------|------------|--------------|---------|---|--------------|---|
| Aneuretus simoni            | Fruit              | Short term<br>trail       | Polydomous | 2<br>or<br>3 | 1       | 1 | ?            | Recruitment: Several trails were observed from nest entrances to rotten, fallen fruit where ants collected juice. Trails lasted several hours (JAYASURIYA & TRANIELLO 1985).  Size: Fallen fruit are large compared to colony (~100 workers), and multiple workers are involved in retrieval of fruit juice (JAYASURIYA & TRANIELLO 1985).  Space: Fallen from canopy in rainforest (JAYASURIYA & TRANIELLO 1985), most likely randomly occurring in the comparatively small foraging range.  Depletability: Foraging will not affect the rate at which fruit falls from above.  Frequency: ?   |
| Aneuretus simoni            | Dead insects       | Solitary                  | Polydomous | 1            | ?       | 1 | 1<br>or<br>2 | Recruitment: Workers scavenge insects and small prey from litter. The paper implies that this is done by solitary foragers, calling it "unspecialized" foraging (JAYASURIYA & TRANIELLO 1985).  Size: Small, can be retrieved by single ants (JAYASURIYA & TRANIELLO 1985).  Space: ?  Depletability: Unlikely to be depleted, because colony size is very small.  Frequency: Litter samples contained "abundant" small arthropods (JAYASURIYA & TRANIELLO 1985).   |
| Aphaenogaster<br>albisetosa | Fruit              | Group re-<br>cruitment    | -          | 2            | 2       | 1 | 2            | Recruitment: Group recruitment to prickly pear fruit (Lanan, personal observation).  Size: Medium, 50-100 workers are often involved in removing bits of fruit and will defend the resource by biting (Lanan, personal observation).  Space: Fruit are clumped in space, on prickly pear plants. Usually only one or two damaged fruits are available at a time, but more are made available via damage by other foraging animals over a period of several months. Ants collect fruit both on the plant and beneath it (Lanan, personal observation).  Depletability: Foraging will not affect the rate at which fruit falls, or the number of fruits the plants produce.  Frequency: Fairly common, although not always available (Lanan, personal observation). |
| Aphaenogaster<br>albisetosa | Large dead insects | Group re-<br>cruitment    | -          | 2            | 1       | ? | ?            | Recruitment: Short-range volatile recruitment, also group recruitment with a leading scout and trail pheromone (HÖLLDOBLER & al. 1995).  Size: Medium, multiple workers needed to retrieve resource via group carrying (HÖLLDOBLER & al. 1995).  Space: Most likely randomly distributed in desert habitat, observed a few times (Lanan, personal observation)  Depletability: ?  Frequency: ?  |
| Aphaenogaster<br>albisetosa | Large dead insects | Volatile re-<br>cruitment | -          | 2            | 1       | ? | ?            | Recruitment: Short-range volatile recruitment, also group recruitment with a leading scout and trail pheromone (HÖLLDOBLER & al. 1995)  Size: Medium, multiple workers needed to retrieve resource via group carrying (HÖLLDOBLER & al. 1995).  Space: Randomly distributed in desert habitat, observed a few times (Lanan, personal observation).  Depletability: ?  Frequency: ?  |
| Aphaenogaster<br>araneoides | Large dead insects | Group re-<br>cruitment    | -          | 2            | 1       | ? | ?            | Recruitment: Group recruitment (McGlynn, personal communication), rotate between nests.  Size: Medium, multiple workers needed to retrieve resource.  Space: Larger dead insects are probably randomly distributed in the relatively small foraging range, falling from canopy.  Depletability: ?  Frequency: ?   |

| Aphaenogaster<br>cockerelli | Seeds              | Solitary                  | -          | 1 | 1 | 1 | 1            | Recruitment: Solitary. Ants fan out from nest entrance and return from various directions with seeds (SANDERS & GORDON 2002).  Size: Small, can be retrieved by one ant.  Space: Personal observation in the same location as the study: dispersed across habitat and fairly common (Lanan, personal observation).  Depletability: Unlikely, ants seem to continue finding seeds over long periods of time in the same area, and the grass drops a large number of seeds. Ants in Portal, AZ, still find seeds dropped in the summer through February on warm days (Lanan, personal observation).  Frequency: Common, foragers are likely to find another seed on the next foraging bout (Lanan, personal observation).   |
|-----------------------------|--------------------|---------------------------|------------|---|---|---|--------------|---|
| Aphaenogaster<br>cockerelli | Large dead insects | Volatile re-<br>cruitment | -          | 2 | 1 | ? | ?            | Recruitment: Short-range volatile recruitment, also group recruitment with a leading scout and trail pheromone (HÖLLDOBLER & al. 1995).  Size: Medium, multiple workers needed to retrieve resource (HÖLLDOBLER & al. 1995).  Space: Likely randomly distributed in desert habitat, observed a few times (Lanan, personal observation).  Depletability: ?  Frequency: ?   |
| Aphaenogaster<br>cockerelli | Large dead insects | Group re-<br>cruitment    | Polydomous | 2 | 1 | ? | ?            | Recruitment: Short-range volatile recruitment, also group recruitment with a leading scout and trail pheromone (HÖLLDOBLER & al. 1995).  Size: Medium, multiple workers needed to retrieve resource.  Space: Most likely randomly distributed in desert habitat (Lanan, personal observation).  Depletability: ?  Frequency: ?  |
| Aphaenogaster<br>cockerelli | Dead<br>insects    | Solitary                  | Polydomous | 1 | 1 | ? | 1<br>or<br>2 | Recruitment: Solitary, polydomous (SANDERS & GORDON 2002). Size: Small, can be retrieved by single ants.  Space: Forage around nest for seeds, dead insects, and single termite workers (SANDERS & GORDON 2002). Personal observation in the same general location as the study suggest that these foods are dispersed on the ground (Lanan, personal observation).  Depletability: ?  Frequency: Small dead insects can be fairly common on the ground in the general location of the study during the summer and A. cockerelli are frequently seen retrieving them (Lanan, personal observation).   |
| Atta bisphaerica            | Leaves:<br>grass   | Trunk trails              | -          | 1 | 1 | ? | 1            | Recruitment: Trunk trails, underground foraging tunnels radiating outward (with fantastic picture of excavations) (MOREIRA & al. 2004).  Size: Small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Grass, in open grassland habitats where it is common and distributed (MOREIRA & al. 2004).  Depletability: ?  Frequency: Continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout common all around.   |
| Atta cephalotes             | Leaves             | Trunk trail               | -          | 1 | 2 | 2 | 1            | Recruitment: Trunk trails (BRENER & SIERRA 1993).  Size: Small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Most likely somewhat patchy, ants collected only 17 of 332 available species (BLANTON & EWEL 1985).  Depletability: Trunk trails rotate, then abandon plants before they are full defoliated and switch plants frequently (BRENER & SIERRA 1993). Can defoliate whole tree seedlings (MEYER & al. 2011).  Frequency: continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout. In a study of different habitat complexities, these ants cut between 0.3% of the total leaf area and 0.03% (BLANTON & EWEL 1985). |
| Atta colombica              | Leaves             | Trunk trail               | _          | 1 | 2 | ? | 1            | Recruitment: Trunk trails, beautiful maps (SILVA & al. 2013).  Size: Small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Leaves from trees, preferably large pioneer species in patches (SILVA & al. 2013).   |

|                             |                    |                            |            |   |   |   |   | Depletability: ? Frequency: Continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout.  |
|-----------------------------|--------------------|----------------------------|------------|---|---|---|---|--|
| Atta laevigata              | Leaves             | Trunk trail                | _          | 1 | 2 | 2 | 1 | Recruitment: Trunk trails (MUNDIM & al. 2009).  Size: Small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Patchy, ants show preference for certain trees (MUNDIM & al. 2009).  Depletability: Colony can defoliate whole trees (MUNDIM & al. 2009).  Frequency: Continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout.  |
| Atta mexicana               | Leaves             | Trunk trail                | _          | 1 | 2 | ? | 1 | Recruitment: Trunk trails (MINTZER 1979).  Size: Small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Collect small dispersed annuals and large perennials, also fallen detritus like dead flowers (MINTZER 1979). In the Sonoran desert these resources tend to be patchy (Lanan, personal obs.).  Depletability:?  Frequency: Continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout common plants are used by the ants.                |
| Atta vollenweideri          | Leaves:<br>Grass   | Trunk trails               | -          | 1 | 1 | 2 | 1 | Recruitment: Trunk trails (ROSCHARD & ROCES 2003a, b).  Size: Small, although large numbers of workers are frequently involved in harvesting a patch, single leaf pieces can be retrieved solitarily by single workers.  Space: Grass, most likely distributed in habitat (ROSCHARD & ROCES 2003a, b).  Depletability: Workers would focus on one patch at the end of a trail for a few days, but then switch patches before depleting the whole area (ROSCHARD & ROCES 2003a, b).  Frequency: Continuously produced by numerous plants in the habitat, foragers are very likely to find another leaf on the next foraging bout. |
| Azteca chartifex            | Tropho-<br>bionts  | Long-term<br>trail network | Polydomous | 2 | 3 | 1 | 1 | Recruitment: Use a long-term trail network (WILSON 1965, HÖLL-DOBLER & WILSON 1990), polydomous carton nests (DEJEAN & al. 2008).  Size: Medium, tended by multiple ants within the shelters.  Space: Multiple carton shelters where ants tend hemipterans on trees (DEJEAN & al. 2008).  Depletability: Ant attendance of trophobionts is unlikely to cause a decrease in the rate at which they secrete honeydew.  Frequency: Foragers are likely to find honeydew in the same location on the next foraging bout (although foraging in this case does not involve leaving the nest).  |
| Brachymyrmex<br>patagonicus | EFN                | Long-term<br>trail network | Polydomous | 2 | 3 | 1 | 1 | Recruitment: Long-term trail network, polydomy (Lanan, personal observation).  Size: Medium, large clusters of nectaries occur on cacti, which are defended by numerous ants (Lanan, personal observation).  Space: Continuously secreted in the exact same patchy location for years (Lanan, personal observation).  Depletability: Foraging definitely does not cause a decrease in nectar secretion by nectaries (Lanan personal observation).  Frequency: Often quite abundant (Lanan, personal observation).  |
| Camponotus<br>cruentatus    | Droppings:<br>bird | Group re-<br>cruitment     | _          | 2 | ? | 1 | ? | Recruitment: They describe group recruitment, with a marked leader ant returning followed by an average of approximately five recruits. (BOULAY & al. 2007).  Size: Group recruitment "may occur when the food source is too large to be exploited by a single individual (e.g., a clump of myrmecochorous seeds or a bird faeces)" (BOULAY & al. 2007).  Space: ?  Depletability: Unlikely to be depleted, as new material falls from above.  Frequency: ?  |
| Camponotus<br>cruentatus    | Droppings          | Solitary                   | _          | 1 | ? | 1 | 2 | Recruitment: Described as solitary, collect mammal, bird, or lizard droppings (ALSINA & al. 1988).  Size: Small, the entire dropping is carried by one worker.  Space: Could be either distributed or patchy, depending on whether birds use the same perches repeatedly.  |

|                     |  |                                    |            |              |   |   |              | <b>Depletability:</b> New droppings are falling from above unlikely to be depleted (ALSINA & al. 1988). <b>Frequency:</b> Over several days, they observed 78 workers return to the nest carrying droppings. However, only 5.9% of workers were carrying objects, most of the rest had liquid food (ALSINA & al. 1988).   |
|---------------------|--|------------------------------------|------------|--------------|---|---|--------------|---|
| Camponotus detritus | Scale insect<br>Honeydew<br>on dune<br>grasses | (?) Long-<br>term trail<br>network | Polydomous | 2 or 3       | 3 | 1 | 1            | Recruitment: Most likely a long-term trail network, but not enough information (CURTIS 1985a, c). Data used for polydomy analysis only.  Size: Medium or large, 150 ants were tending the scales above a location where they injected dye into the plant stem (CURTIS 1985a, c).  Space: Plants are patchily distributed in a sand dune habitat (CURTIS 1985a, c).  Depletability: Honeydew was collected day and night, available year round.  Frequency: Foragers are likely to find honeydew at the same location on the next foraging bout. Incidence of the scale varied between locations, from 8.9% to 97% of grass infested (CURTIS 1985a, c).  |
| Camponotus gigas    | Droppings:<br>vertebrate                       | Group re-<br>cruitment             | Polydomous | 2<br>or<br>3 | 1 | 1 | 3            | Recruitment: Group recruitment with a scout along existing trail network (PFEIFFER & LINSENMAIR 1998).  Size: "Excrement or cadavers of larger vertebrates are huge resources that cannot be effectively exploited by single workers" (PFEIFFER & LINSENMAIR 1998).  Space: Ants foraged for "for randomly dispersed food (bird droppings, insects, cadavers)" (PFEIFFER & LINSENMAIR 1998).  Depletability: Unlikely, collection of excrement is not likely to change the frequency at which it is deposited.  Frequency: Large excrements are "occasionally" visited, suggesting they are not frequently encountered (PFEIFFER & LINSENMAIR 1998).  |
| Camponotus gigas    | Large<br>carrion                               | Group re-<br>cruitment             | Polydomous | 2<br>or<br>3 | 1 | 1 | 3            | Recruitment: Group recruitment along the existing trail network (PFEIFFER & LINSENMAIR 1998).  Size: "Excrement or cadavers of larger vertebrates are huge resources that cannot be effectively exploited by single workers" (PFEIFFER & LINSENMAIR 1998).  Space: "Randomly dispersed" food (PFEIFFER & LINSENMAIR 1998, 2001).  Depletability: Collection of cadavers is not likely to change the frequency at which they are deposited in the future.  Frequency: Cadavers are "occasionally" visited, suggesting they are not frequently encountered (PFEIFFER & LINSENMAIR 1998).  |
| Camponotus gigas    | Honeydew                                       | Long-term<br>trail network         | Polydomous | 2 or 3       | 3 | 1 | 1            | Recruitment: Trail network (map), polydomy (PFEIFFER & LIN- SENMAIR 1998).  Size: Medium or large, "several large aggregations" in the canopy are tended by large numbers of foragers.  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Honeydew was generally very clumped, with colonies tending several aggregations. "During the whole time of our research we found only two large trophobiotic associations that were exploited by giant ants, though we searched intensively on the ground and in the trees" (PFEIFFER & LINSENMAIR 1998).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs Likely to be consistently produced over time. They don't report any changes in the availability of honeydew at the two aggregations over the course of the study.  Frequency: Continuously secreted, therefore likely that a forager can find honeydew in the next foraging bout at the same aggregation. Although not common in every area of the foraging range, it was frequently collected (PFEIFFER & LINSENMAIR 1998). |
| Camponotus gigas    | Small prey                                     | Solitary                           | Polydomous | 1            | 1 | ? | 1<br>or<br>2 | Recruitment: Solitary (PFEIFFER & LINSENMAIR 2001).  Size: Small, can be retrieved by one ant.  Space: Diurnal solitary foragers that collected insect prey "generally did not climb trees, they mostly searched on the ground or within the lower vegetation" described as "widely dispersed within the rain forest" (PFEIFFER & LINSENMAIR 2001).  Depletability: ?  Frequency: At the beginning of the rainy season, when termites and ants had their nuptial flights, C. gigas' hunting success rose. Much prey was brought to the nest when rain immobilized the winged sexuals (PFEIFFER & LINSENMAIR 2001).  |

| Camponotus modoc             | Honeydew: aphids    | (?) Long-<br>term trail<br>network or<br>trunk trail | Polydomous | 2 | 3 | 1 | 1 | Recruitment: Long trails that persist in the same location over multiple years (DAVID & WOOD 1980). Appear to be possibly more similar to trunk trails, but map does not show nest locations. Data used only for polydomy analysis.  Size: Medium, tended by multiple ants. Average of 5.5 ants per aphid colony for one aphid species, average of 1.7 per colony for another (TILLES & WOOD 1982).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Aphids were patchy, located only on smaller trees in sequoia forest, separated by expanses of forest floor with little vegetation (map) (DAVID & WOOD 1980, TILLES & WOOD 1986).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs. Aphid colonies are found on the trees all season, and are likely to re-occur in the exact same location the next year (DAVID & WOOD 1980).  Frequency: Continuously secreted, therefore likely that a forager can find honeydew in the next foraging bout. The number of aphid colonies varied from year to year, but honeydew was most common food source used by ants in all years (TILLES & WOOD 1982). |
|------------------------------|---------------------|--|------------|---|---|---|---|--|
| Camponotus<br>pennsylvanicus | Honeydew:<br>aphids | Long-term<br>trail network                           | Polydomous | ? | 3 | ? | 1 | Recruitment: Polydomous nests interconnected by long-term trails (BUCZKOWSKI 2011).  Size: ?  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Aphid colonies were patchy, located within the same trees where their polydomous nests were located (BUCZKOWSKI 2011).  Depletability: ?  Frequency: Honeydew is commonly collected and continuously secreted, therefore likely that a forager can find honeydew in the next foraging bout.  |
| Camponotus sericeus          | EFN                 | Solitary   | -          | 1 | 3 | 1 | 1 | Recruitment: Solitary foraging only (MODY & LINSENMAIR 2003).  Size: Small. A single ant spends a long time at one nectary to collect EFN, and multiple ants are apparently not necessary to defend the resource.  Space: The EFN-secreting trees grow in dense stands. Extrafloral nectaries occur on all leaves on the entire tree. One ant colony visits 16 trees surrounding it and workers visit all the leaves.  Workers return to the exact same nectary repeatedly. (MODY & LINSENMAIR 2003).  Depletability: Foraging is unlikely to cause a decrease in nectar secretion by nectaries.  Frequency: Nectar is apparently secreted every day, but very slowly. Nectaries are extremely frequent in the stand of trees around the ant nests (MODY & LINSENMAIR 2003).   |
| Camponotus socius            | Honeydew            | Long-term<br>trail network                           | Polydomous | ? | 3 | 1 | 1 | Recruitment: Map shows long-term trail network with polydomous nests, linking to plants with honeydew (HÖLLDOBLER 1971).  Size: unclear whether multiple ants are needed to defend patch.  Space: Honeydew is secreted by insects in palmetto bushes, which are highly patchy on the map (HÖLLDOBLER 1971).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs. Honeydew is described as "standing food sources" suggesting that it is consistently secreted over time (HÖLLDOBLER 1971).  Frequency: Ants continuously visit the patches, suggesting honeydew is common and continuously secreted.  |
| Cataglyphis bicolor          | Dead insects        | Solitary   | Polydomous | 1 | 1 | 1 | ? | Recruitment: Solitary foraging (SCHMID-HEMPEL 1984). Size: Small, items are retrieved by single ants. Space: Dead insects are "approximately evenly distributed over the foraging range of a colony" (SCHMID-HEMPEL 1984). Depletability: Unlikely to be depleted, since insects are blowing into habitat from outside the foraging range. Frequency: ?  |
| Cataglyphis floricola        | Flower petals       | Solitary   | _          | 1 | 1 | 1 | 1 | Recruitment: Solitary (CERDÁ & al. 1992).  Size: Small, can be transported by single workers (CERDÁ & al. 1992).  Space: Distributed throughout the foraging range. Online photos of the park where the study was conducted show a uniform distribution of numerous flowers on dense shrubs, so it's very likely that petals would fall anywhere.  Depletability: Unlikely to be depleted, petals are falling from plants above.  Frequency: very common during flowering period (CERDÁ & al. 1992).   |

| Cataglyphis fortis        | Dead insects                                       | Solitary                   | Polydomous | 1 | 1            | 1 | 2            | Recruitment: Solitary foraging (WOLF & WEHNER 2000).  Size: Small, can be retrieved by single ants.  Space: "Unpredictable distribution of food", foraging area is flat desert lacking vegetation (WOLF & WEHNER 2000).  Depletability: Unlikely to be depleted, since insects are blowing into habitat from outside the foraging range.  Frequency: Moderately common (authors quantify numbers of successful vs. unsuccessful workers returning) (WOLF & WEHNER 2000)  Recruitment: Solitary foraging.  |
|---------------------------|--|----------------------------|------------|---|--------------|---|--------------|---|
| Cataglyphis iberica       | Dead insects                                       | Solitary                   | Polydomous | 1 | 1            | 1 | !            | Size: Small, can be retrieved by single ants.  Space: Unpredictable, food is dispersed in fairly uniform barren desert habitat (DAHBI & LENOIR 1998, CERDÁ & al. 2002).  Depletability: Unlikely to be depleted, since insects are blowing into habitat from outside the foraging range.  Frequency: ?  |
| Cataglyphis niger         | Dead insects                                       | Solitary                   | _          | 1 | 1            | 1 | ?            | Recruitment: Solitary (WENSELEERS & al. 2002).  Size: Small, can be retrieved by single ants.  Space: Dead insects are "unpredictable", "ephemeral" (WENSELEERS & al. 2002). I've interpreted this to mean that food is randomly dispersed in the barren habitat similar to other cases.  Depletability: Unlikely to be depleted, since insects are blowing into habitat from outside the foraging range.  Frequency: ?   |
| Cataglyphis savignyi      | Dead insects                                       | Solitary                   | _          | 1 | 1            | 1 | 2            | Recruitment: Solitary (DIETRICH & WEHNER 2003).  Size: Small, can be retrieved by single ants.  Space: Collect insects that die from heat, distributed across the foraging area (DIETRICH & WEHNER 2003).  Depletability: Unlikely to be depleted, since insects are blowing into habitat from outside the foraging range.  Frequency: Food density is low enough that foragers are not always successful, workers do a few foraging trips per day and search a large area (DIETRICH & WEHNER 2003).  |
| Centromyrmex<br>bequaerti | Group of small prey: termites                      | Group re-<br>cruitment     | _          | 2 | ?            | ? | 2            | Recruitment: Group recruitment, live and hunt within the termite nest (DEJEAN & FENERON 1999).  Size: Medium, several ants are needed to capture the termites (DEJEAN & FENERON 1999).  Space: ?  Depletability: ?  Frequency: Termites are likely to be fairly common within the termite nest, which is the foraging range. However they are likely to use defenses or avoid the ants, so every foraging trip might not be successful.   |
| Centromyrmex<br>bequaerti | Small prey:<br>single<br>termite                   | Solitary                   | _          | 1 | ?            | ? | 1<br>or<br>2 | Recruitment: Solitary (DEJEAN & FENERON 1999).  Size: Small, can be retrieved by one ant.  Space: Live inside termite nest, foraging area is the termite nest (DEJEAN & FENERON 1999).  Depletability: ?  Frequency: Likely to be fairly common within the termite nest.  |
| Cephalotes<br>goniodontus | EFN  | Long-term<br>trail network | Polydomous | ? | or<br>3      | 1 | 1            | Recruitment: Long-term trail network, polydomy.  Size: ?  Space: Colonies of <i>C. goniodontus</i> "collect resources that are patchy and persist for several days Nectaries on buds or at the base of leaves, nectar in flowers, and phloem extracted on leaf wounds, may all be available for days at a time" (GORDON 2012).  Depletability: Foraging is unlikely to cause a decrease in nectar secretion by nectaries.  Frequency: Suggests in the discussion that nectar and plant juices are continuously secreted over periods of days and commonly used (GORDON 2012).               |
| Cephalotes<br>goniodontus | Plant<br>secretions<br>from<br>herbivory<br>wounds | Long-term<br>trail network | Polydomous | ? | 2<br>or<br>3 | 1 | 1            | Recruitment: Long-term trail network, polydomy (GORDON 2012). Size: ?  Space: Colonies of <i>C. goniodontus</i> "collect resources that are patchy and persist for several days Nectaries on buds or at the base of leaves, nectar in flowers, and phloem extracted on leaf wounds, may all be available for days at a time" at the same location (GORDON 2012).  Depletability: Unlikely to be depleted, continuously secreted while the wound persists.  Frequency: Suggests in the discussion that nectar and plant juices are continuously secreted over periods of days (GORDON 2012). |

| Cheliomyrmex<br>andicola     | Large prey                       | Raid                       | Nomadic    | 3   | ?            | ? | 2<br>or<br>3 | Recruitment: Raiding, nomadism. Feed on large invertebrates and vertebrates (O'DONNELL & al. 2005).  Size: Large, numerous workers are involved in capturing, subduing, and retrieving large invertebrates and vertebrates (O'DONNELL & al. 2005).  Space: ?  Depletability: ?  Frequency: Very large prey are most likely less common than small prey within the foraging range of a bivouac before it moves.   |
|------------------------------|----------------------------------|----------------------------|------------|-----|--------------|---|--------------|--|
| Crematogaster<br>opuntiae    | EFN                              | Long-term<br>trail network | Polydomous | 2   | 3            | 1 | 1            | Recruitment: Long-term trail network, polydomy (LANAN & BRONSTEIN 2013).  Size: Medium, large clusters of nectaries on cacti are defended by 10 - 150 ants at a time (LANAN & BRONSTEIN 2013).  Space: Continuously secreted in the exact same location for years (LANAN & BRONSTEIN 2013).  Depletability: Foraging does not cause a decrease in nectar secretion by nectaries (Lanan, personal observation).  Frequency: Secreted year-round (LANAN & BRONSTEIN 2013).   |
| Crematogaster<br>scutellaris | Pig carcass<br>(and fly<br>eggs) | (?) Short-term trails      | Polydomous | 3   | 2<br>or<br>3 | 1 | 3            | Recruitment: Ants recruited- probably a short term trail based on my observations of other species of <i>Crematogaster</i> at similar foods, but not enough information in paper (BONACCI & al. 2011). Used in polydomy analysis only.  Size: Large patch, numerous ants were necessary to harvest the fly eggs that were deposited in high numbers over a short period of time on the carcass (BONACCI & al. 2011).  Space: Very clumped in one location (BONACCI & al. 2011).  Depletability: Unlikely to be depleted, flies are coming in and laying eggs at a rate that probably is not affected by the ants.  Frequency: Foraged one day (until bloating) but another carcass is unlikely to reoccur within the territory again for a long time (BONACCI & al. 2011). |
| Crematogaster<br>scutellaris | Honeydew                         | Long-term<br>trail network | Polydomous | 2 ? | 3            | 1 | 1            | Recruitment: Long-term trail network, polydomy, map (SANTINI & al. 2011).  Size: Medium, ants tend clusters of homopterans (these are likely large enough to be tended by more than one ant, although this is not entirely clear in the paper).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Insects were clustered on trees in an olive orchard (SANTINI & al. 2011).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: Common in orchard, continuously secreted (SANTINI & al. 2011).  |
| Crematogaster<br>torosa      | EFN                              | Long-term<br>trail network | Polydomous | 2   | 3            | 1 | 1            | Recruitment: Long-term trail network, polydomy (Lanan & al. 2011) Size: Medium, large clusters of nectaries on cacti are defended by numerous ants (Lanan, personal observation). Space: Continuously secreted in the exact same location for years (Lanan & Bronstein 2013). Depletability: Foraging does not cause a decrease in nectar secretion by nectaries (Lanan, personal observation). Frequency: Secreted year-round (Lanan & Bronstein 2013).   |
| Daceton armigerum            | Large prey                       | Short-term trails          | -          | 2   | 1            | ? | ?            | Recruitment: Description matches short-term trails (DEJEAN & al. 2012).  Size: Medium, multiple workers needed to retrieve large grass-hoppers (DEJEAN & al. 2012).  Space: Ambush insects landing on nest tree, paper implies that landing is somewhat random within foraging area (DEJEAN & al. 2012).  Depletability: ?  Frequency: ?   |
| Daceton armigerum            | Small prey:<br>flies             | Solitary                   | _          | 1   | 1            | 1 | 2            | Recruitment: Solitary, ambush predators (DEJEAN & al. 2012).  Size: Small, can be retrieved by one ant.  Space: Ambush insects landing on nest tree, paper implies that landing is somewhat random within foraging area (DEJEAN & al. 2012).  Depletability: Unlikely to be depleted, flies are coming in from elsewhere.  Frequency: Fairly commonly collected.   |
| Daceton armigerum            | Large prey                       | Volatile re-<br>cruitment  | _          | 2   | 1            | 1 | ?            | Recruitment: Short-range volatile recruitment, ambush prey (DEJEAN & al. 2012)  Size: Medium, multiple workers needed to retrieve prey up to 100 × the weight of one worker.   |

|                          |                                      |                     |            |   |   |   |              | Space: Ambush insects landing on nest tree, paper implies that landing is somewhat random within foraging area (DEJEAN & al. 2012)  Depletability: Unlikely to be depleted, landing on tree, arriving from elsewhere.  Frequency: ?   |
|--------------------------|--------------------------------------|---------------------|------------|---|---|---|--------------|---|
| Decamorium decem         | Small prey                           | Solitary            | -          | 1 | 2 | ? | 1<br>or<br>2 | Recruitment: Solitary hunting (DUROU & al. 2001).  Size: Small, can be retrieved by one ant.  Space: Small prey is patchy in the dry season, clustered in humid patches in the rainforest leaf litter (DUROU & al. 2001).  Depletability: ?  Frequency: The researchers found a fair amount of potential prey after setting out artificial humid patches in the foraging area, suggesting that prey are fairly common at least in some spots (DUROU & al. 2001).  |
| Decamorium uelense       | Groups of<br>small prey:<br>termites | Short-term<br>trail | -          | 2 | 1 | ? | 1            | Recruitment: Short-term trails (initial phase is similar to group recruitment, but unclear if a scout is necessary; later phase is definitely mass recruitment along a trail) (LONGHURST & al. 1979).  Size: Medium, several ants are needed to capture the termites.  Space: Termites were foraging in grass stems. From the description in the paper, it sounds like at any given time termites are focusing on specific patches, but not predictably distributed in the grassland over time (LONGHURST & al. 1979).  Depletability: ?  Frequency: Termites are very common, especially in cultivated land (they provide an estimate) (LONGHURST & al. 1979). |
| Dinoponera gigantea      | Dead insects                         | Solitary            | Polydomous | 1 | ? | ? | 2            | Recruitment: Solitary (FOURCASSIE & OLIVEIRA 2002).  Size: Small, can be retrieved by single ants.  Space: These ants forage on the ground in deep leaf litter under a dense forest canopy. Unclear if dead insects are patchy or distributed in litter (FOURCASSIE & OLIVEIRA 2002).  Depletability: ?  Frequency: Fairly commonly observed as collected items (FOURCASSIE & OLIVEIRA 2002)  |
| Dinoponera gigantea      | Seeds and<br>small fruit             | Solitary            | Polydomous | 1 | 1 | 1 | 2            | Recruitment: Always solitary, can be polydomous, nest at bases of trees (FOURCASSIE & OLIVEIRA 2002).  Size: Small, can be retrieved by one ant.  Space: Forage on the ground in deep leaf litter under a dense forest canopy. Seeds and fruits fall from the canopy, and are likely to be randomly distributed in the comparatively small foraging range of the ants (map included) (FOURCASSIE & OLIVEIRA 2002).  Depletability: Unlikely to be depleted, fall from canopy (FOURCASSIE & OLIVEIRA 2002).  Frequency: Fairly commonly observed as collected items (FOURCASSIE & OLIVEIRA 2002).  |
| Dinoponera gigantea      | Small prey                           | Solitary            | Polydomous | 1 | ? | ? | 2            | Recruitment: Always solitary (FOURCASSIE & OLIVEIRA 2002). Size: Small, can be retrieved by one ant. Space: Forage on the ground in deep leaf litter under a dense forest canopy. Unclear if patchy or distributed in litter (FOURCASSIE & OLIVEIRA 2002). Depletability: ? Frequency: Fairly commonly observed as collected items (FOURCASSIE & OLIVEIRA 2002).  |
| Dinoponera<br>quadriceps | Dead insects                         | Solitary            | _          | 1 | ? | ? | 2            | Recruitment: Solitary foragers in leaf litter under dense forest canopy (ARAUJO & RODRIGUES 2006).  Size: Small, can be retrieved by single ants.  Space: ?  Depletability: ?  Frequency: Ants were frequently observed returning with these items, so they are at least somewhat common (ARAUJO & RODRIGUES 2006)  |
| Dinoponera<br>quadriceps | Seeds and<br>small fruit             | Solitary            |            | 1 | 1 | 1 | 1<br>or<br>2 | Recruitment: Solitary (ARAUJO & RODRIGUES 2006).  Size: Small, can be retrieved by one ant.  Space: Forage in leaf litter under dense forest, probably dispersed because seeds are falling from above into small foraging range (ARAUJO & RODRIGUES 2006).  Depletability: Unlikely to be depleted, Seeds and fruit fall from the canopy into the relatively small foraging range (ARAUJO & RODRIGUES 2006).  Frequency: Ants were frequently observed returning with these items (ARAUJO & RODRIGUES 2006).  |

| Dolichoderus mariae         | Honeydew          | Long-term<br>trail network | Polydomous  | 2      | 3 | 1 | 1      | Recruitment: Polydomous with nests in the roots of plants like grasses, where they collect honeydew from coccids and aphids. Interconnected by long-term trail network (LASKIS & TSCHINKEL 2009).  Size: Coccid and aphid colonies are on numerous plants, often with a small associated "satellite" nest. Aphid colonies typically had thousands of individuals, while coccids had hundreds (LASKIS & TSCHINKEL 2009). Classified as medium because colonies tended multiple aggregations.  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Common in the habitat, but located in clusters on plants. Reference includes a nice photo of the habitat (LASKIS & TSCHINKEL 2009).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs. Workers were observed arriving and later leaving with gasters full, suggesting honeydew is consistently produced over time (LASKIS & TSCHINKEL 2009).  Frequency: Patches persisted throughout the season and were common (LASKIS & TSCHINKEL 2009). |
|-----------------------------|-------------------|----------------------------|-------------|--------|---|---|--------|---|
| Dolichoderus<br>sulcaticeps | Honeydew          | Long-term<br>trail network | Polydomous  | 2      | 3 | 1 | 1      | Recruitment: Long-term trail network, leading from polydomous nests to homopteran aggregations (ROHE & MASCHWITZ 2003)  Size: Medium, aggreggations are visited by multiple ants at a time (2 - 23) (ROHE & MASCHWITZ 2003).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Ants periodically pick up the insects and carry them to a new location (ROHE & MASCHWITZ 2003). Predictable in space because the ants know where they are moving the herd.  Depletability: Collection of honeydew does not decrease the rate at which it occurs. This is a long-term association, and mealybugs are carried from place to place in order to take advantage of fresh vegetation (ROHE & MASCHWITZ 2003).  Frequency: Honeydew is continuously secreted and ants tend numerous insects (ROHE & MASCHWITZ 2003).   |
| Dolichoderus<br>sulcaticeps | Tropho-<br>bionts | Long-term<br>trail network | Polydomous  | 2      | 3 | 1 | 1      | Recruitment: Build polydomous carton nests in tree canopy, with trails linking nests and going up into the canopy. Most likely a long-term trail network (ROHE & MASCHWITZ 2003).  Size: Groups of trophobionts are tended by multiple ants within the nest.  Space: Highly clumped within the nest, where they feed at veins on underside of leaf (ROHE & MASCHWITZ 2003).  Depletability: Ant attendance of trophobionts is unlikely to cause a decrease in the rate at which they secrete honeydew. Trophobionts were always found in nests, suggesting long-term association (ROHE & MASCHWITZ 2003).  Frequency: Foragers are likely to find honeydew in the same location on the next foraging bout (although foraging in this case does not involve leaving the nest). Common, in all the nests.   |
| Dolichoderus<br>thoracicus  | Honeydew          | Long-term<br>trail network | Polydomous  | 2      | 3 | 1 | 1      | Recruitment: Long-term trail network with polydomy in an orchard, maps included (WAY & KHOO 1991).  Size: Medium, multiple ants tend clusters of pesudococcids on cocoa pods, as well as clusters of Homoptera on palms (WAY & KHOO 1991).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Insects are clustered on trees, which are patchily distributed in the orchard and only occur on trees that bore large pods and on palms (WAY & KHOO 1991).  Depletability: Clusters were tended over time and probably secreted continuously, unlikely to be depleted.  Frequency: Very common on map (WAY & KHOO 1991).  |
| Dorylus laevigatus          | Termite nest      | Long-term<br>trail network | (?) Nomadic | 2 or 3 | 3 | 1 | 1 or 2 | Recruitment: Map shows "trunk trails", which best fit my definition of a long-term trail network. Raids apparently branch off from trunk trails in a manner similar to <i>Pheidologeton</i> (BERGHOFF & al. 2002a).  Size: Medium or large. Large numbers of ants are involved in attacking the termite nests, which contain large numbers of termites. Space: Map shows termite mounds within foraging range and trails leading to them. This is a patchy resource. "These trails could lead to constant food sources such as a termite mound where the workers waited for the opportunity to snatch some prey" (BERGHOFF & al. 2002a).  Depletability: Authors say in the discussion that they think the ants use prey in the large foraging area in a sustainable way, in order to persist in the same location over time. None of the observed mounds showed signs of destructive raiding, and " <i>Dorylus laevi-</i>  |

|   |                    |           |             |              |         |                     |         | gatus exploited bulky food sources such as termite mounds or baits over long periods of time" (BERGHOFF & al. 2002a).  Frequency: "Termite abundance was high", and termites were "constant food sources" (BERGHOFF & al. 2002a).   |
|---|--------------------|-----------|-------------|--------------|---------|---------------------|---------|---|
| Dorylus laevigatus                        | Large dead insects | Raid      | (?) Nomadic | 2            | ?       | 1                   | ?       | Recruitment: Raiding, probably nomadism. In Figure 3 and associated text, it appears they make short-term trails to larger food sources (e.g., a dead insect on the surface), however in the text they describe the formation of these trails via column raid behavior and not via short-term trail recruitment. (BERGHOFF & al. 2002a, BERGHOFF & al. 2002b).  Size: Medium, multiple workers needed to retrieve resource.  Space: ?  Depletability: Raiding is unlikely to affect the future occurrence of dead insects, which are probably falling from the plants above.  Frequency: ?  |
| Dorylus laevigatus                        | Small prey         | Raid      | (?) Nomadic | 1<br>or<br>2 | ?       | 1                   | 2       | Recruitment: Swarm raids branch from main trails, proceed across and through the soil where they collect a variety of small prey (BERGHOFF & al. 2002a).  Size: Small or medium, items can be retrieved by one or several ants.  Space: ?  Depletability: Authors say in the discussion that they think the ants use prey in the large foraging area in a sustainable way, in order to persist in the same location over time (BERGHOFF & al. 2002a).  Frequency: At least somewhat common, authors observed various prey items being retrieved over time (BERGHOFF & al. 2002a).   |
| Dorylus laevigatus                        | Termite nest       | Raids     | (?) Nomadic | 2<br>or<br>3 | 3       | 1                   | or<br>2 | Recruitment: Raids, branching off from trunk trails (BERGHOFF & al. 2002a).  Size: Medium or large termite nests.  Space: Map shows termite mounds within foraging range as a patchy resource. "These trails could lead to constant food sources such as a termite mound where the workers waited for the opportunity to snatch some prey" (BERGHOFF & al. 2002a).  Depletability: Authors say in the discussion that they think the ants use prey in the large foraging area in a sustainable way, in order to persist in the same location over time. The mounds did not show signs of raid damage (BERGHOFF & al. 2002a).  Frequency: "Termite abundance was high" (BERGHOFF & al. 2002a).   |
| Dorylus nigricans<br>(molestus, rubellus) | Large prey         | Raid      | Nomadic     | 2            | ?       | 2<br>or<br>3<br>(?) | ?       | Recruitment: Massive swarm raids, nomadism (SCHÖNING & al. 2005). Search throughout leaf litter, up into vegetation during raids. Size: Medium, multiple workers are needed to retrieve prey such as earthworms, insects, slugs, and myriapods (SCHÖNING & al. 2005). Space: ?  Depletability: Within 17 days the raids will have covered most of the area around the nest. Authors are of the opinion that prey is depleted: "Although the populations of its prey animals may recover more quickly to pre-raid levels than those of social insects, it is hard to imagine that the area around the nest could be used in a sustainable manner. "They cite the evidence that ants emigrate both away from their nest site and the direction of the nearest neighbor army ant colony (SCHÖNING & al. 2005).  Frequency: ? |
| Dorylus nigricans<br>(molestus, rubellus) | Termite nest       | Raid      | Nomadic     | 3            | ?       | 3                   | 3       | Recruitment: Raids (SCHÖNING 2007).  Size: Large. Raided an entire termite nest, retrieving more than 2 kg dry weight termites. Apparently collected more termites than they could consume, leaving the rest to rot in the former bivouac site (SCHÖNING 2007).  Space: Clumped in space (termite nest).  Depletability: Most or all of the nest was likely destroyed.  Frequency: Unclear whether this is a commonly used food source not observed, or a rare occurrence. Unlikely that there are very many large termite nests within the current foraging range of the colony before it moves.   |
| Dorylus orientalis                        | Roots              | (?) Raids | (?) Nomadic | 2<br>or<br>3 | or<br>2 | 2<br>or<br>3        | 2       | Recruitment: Apparently nomadic, forage on starchy roots. After roots on one plant are killed the ants depart to a new plant via underground tunnels (NIU & al. 2010). Data used only for nomadism, wish there was more information on foraging in this peculiar army ant.  Size: Medium or large. Numerous ants are involved in collecting large roots such as potatoes. Photo shows a number of ants attacking one root (NIU & al. 2010).   |

|                   |            |      |         |              |   |   |              | Space: Plants in the study were in a patch (NIU & al. 2010).  Depletability: After the root is destroyed, the plant is killed. Over the course of 40 days the ants killed an entire field of plants (NIU & al. 2010). Not likely to re-grow for at least a little while.  Frequency: Plants were fairly common at least in agricultural fields (NIU & al. 2010).  |
|-------------------|------------|------|---------|--------------|---|---|--------------|---|
| Dorylus wilverthi | Small prey | Raid | Nomadic | 1<br>or<br>2 | 1 | ? | 1<br>or<br>2 | Recruitment: Raid, nomadic (KASPARI & al. 2011).  Size: Small or medium, can be retrieved by one or several ants (KASPARI & al. 2011).  Space: Swarm raids cover a large area in forest litter, at this scale small arthropods are likely to occur throughout the litter in a fairly uniform way.  Depletability: ?  Frequency: Collected a large number of items on raids, suggesting that prey is common in the litter (KASPARI & al. 2011). If raids progress in different directions on different days, it is likely that raids will find more small prey on subsequent foraging bouts before the colony moves.   |
| Eciton burchelli  | Ant nest   | Raid | Nomadic | 2 or 3       | 2 | 2 | 1<br>or<br>2 | Recruitment: Swarm raids (FRANKS & FLETCHER 1983)  Size: The resource is medium or large, as many ants are involved in the raid in order to overcome the ant nest.  Space: Some patches have denser prey than others (KASPARI & al. 2011). Feed on all types of prey, ant nests in rainforest (FRANKS & FLETCHER 1983).  Depletability: The authors contend that prey is depleted in short term, but make no measurements (FRANKS AND FLETCHER 1983). Raids do deplete some prey groups to a small extent, and to a greater extent in the richest prey patches. However, they do not deplete prey as much as Labidus (KASPARI & al. 2011). Not entirely clear how ant nests compare to other prey in terms of depletability.  Frequency: Nests are common in the litter, and raids progress in different directions on different days (FRANKS & FLETCHER 1983). It is therefore likely that raids will find new sources on subsequent foraging bouts before the colony moves. |
| Eciton burchelli  | Large prey | Raid | Nomadic | 2            | 2 | 2 | ?            | Recruitment: Swarm raids (KASPARI & al. 2011).  Size: Medium, multiple workers needed to capture and retrieve prey.  Space: Some patches have denser prey than others (KASPARI & al. 2011). Feed on all types of prey, ant nests in rainforest (FRANKS & FLETCHER 1983).  Depletability: Authors contend that prey is depleted in short term, but make no measurements (FRANKS & FLETCHER 1983). Raids do deplete some prey groups a little bit, and to a greater extent in the richest prey patches. However, they do not deplete prey as much as Labidus (KASPARI & al. 2011).  Frequency: ?  |
| Eciton burchelli  | Small prey | Raid | Nomadic | 1 or 2       | 2 | 2 | 1<br>or<br>2 | Recruitment: Swarm raids (FRANKS & FLETCHER 1983).  Size: Small or medium, can be retrieved by one or several ants.  Space: Some patches have denser prey than others (KASPARI & al. 2011). Feed on all types of prey, ant nests in rainforest (FRANKS & FLETCHER 1983).  Depletability: Contend that prey is depleted in short term, but no measurement (FRANKS & FLETCHER 1983). Raids do deplete some prey groups a little bit, and to a greater extent in the richest prey patches. However, they do not deplete prey as much as Labidus (KASPARI & al. 2011).  Frequency: If raids progress in different directions on different days, it is likely that raids will find more small prey on subsequent foraging bouts before the colony moves.   |
| Eciton hamatum    | Ant nest   | Raid | Nomadic | 3            | ? | 3 | 2<br>or<br>3 | Recruitment: Column raids (POWELL 2011).  Size: Large ant nests are overcome by large raids, at which point large amounts of material are retrieved (POWELL 2011).  Space: ?  Depletability: The resource is likely depleted, since large nests are destroyed (POWELL 2011).  Frequency: Multiple small nests are likely to be found by raids within the foraging range of a bivouac before it moves. Large ant nests are not as common as small nests and may require some searching before the next raid finds one.   |
| Eciton rapax      | Ant nest   | Raid | Nomadic | 2<br>or<br>3 | ? | ? | 2<br>or<br>3 | Recruitment: Raids, nomadism (BURTON & FRANKS 1985).  Size: Medium or large, many ants are involved in the raid in order to overcome the ant nest (BURTON & FRANKS 1985).   |

|                           |   |                      |            |              |              |   |              | Space: ? Depletability: ? Frequency: Multiple small nests are likely to be found by raids within the foraging range of a bivouac before it moves. Large ant nests are not as common as small nests and may require some searching before the next raid finds one.   |
|---------------------------|---|----------------------|------------|--------------|--------------|---|--------------|---|
| Ectatomma<br>brunneum     | Small prey:<br>flies                              | Solitary             | -          | 1            | 3            | 1 | 3            | Recruitment: Solitary hunting (GOMES & al. 2009).  Size: Small, can be retrieved by one ant.  Space: Nest in the ground in open habitats like fields. In this case they describe hunting of flies around a pig carcass, which is a concentrated patch (GOMES & al. 2009).  Depletability: Unlikely, flies are coming in from surrounding area based on odor cues regardless of whether they are captured by the ants.  Frequency: Observed over the first 24h of decomposition when flies were common, probably decline after that. A dense patch of flies is unlikely to reoccur in the foraging range again (GOMES & al. 2009).                                 |
| Ectatomma<br>opaciventre  | Small prey:<br>leafcutter<br>ants and<br>termites | Solitary             | -          | 1            | 3            | 1 | 2            | Recruitment: Solitary only (PIE 2004). Size: Small, can be retrieved by one ant. Space: Authors say that termites seem to be clustered in space and are most likely found around their nest entrances (GOMES & al. 2009). Depletability: Unlikely, because colonies are comparatively very small (GOMES & al. 2009). Frequency: Workers were observed to repeatedly collect prey during the study.  |
| Ectatomma ruidum          | EFN   | Solitary             | _          | 1            | 2<br>or<br>3 | 1 | 1<br>or<br>2 | Recruitment: Solitary. Size: Small, a single ant can retrieve a droplet from a nectary and multiple ants are apparently not necessary to defend the resource. (PRATT 1989).  Space: Extrafloral nectaries secrete over a period of time and occur on particular plants, so the next droplet is likely to occur in the same place or on a nearby nectary.  Depletability: Foraging is unlikely to cause a decrease in nectar secretion by nectaries.  Frequency: Ants made multiple trips to nectaries, suggesting resource is common and can be found on subsequent foraging trips.   |
| Ectatomma ruidum          | Dead insects                                      | Solitary             | _          | 1            | 1            | ? | 2            | Recruitment: Solitary (SCHATZ & al. 1995). Size: Small, can be retrieved by single ants. Space: Dead insects were dispersed more or less randomly in the leaf litter where I observed these ants in Costa Rica (Lanan, personal observation). Depletability: ? Frequency: ?   |
| Ectatomma ruidum          | Fruit   | Group<br>recruitment | -          | 2<br>or<br>3 | 1            | 1 | ?            | Recruitment: Although the author says they use mass recruitment, the description is more similar to group recruitment and they did not demonstrate that the group was not led by a scout (PRATT 1989). Listed as group recruitment because other publications on <i>Ectatomma</i> all indicate that ants in this genus use group recruitment. Size: Fallen fruit is medium or large relative to the colony, depending on size.  Space: Falls from the canopy (PRATT 1989), therefore likely to occur anywhere within relatively small foraging range of this ant. Depletability: Foraging will not affect the rate at which fruit falls from above.  Frequency: ? |
| Ectatomma<br>tuberculatum | Small prey  | Solitary             | Polydomous | 1            | 2            | 1 | or<br>2      | Recruitment: Sit and wait predation, solitary foragers (FRANZ & WCISLO 2003).  Size: Small, can be retrieved by one ant.  Space: Ants return to specific patches on vegetation where they sit and wait to catch prey, usually at flowers or nectaries (FRANZ & WCISLO 2003).  Depletability: Unlikely, if prey is drawn in to the area by the flower or nectary.  Frequency: Observed multiple trips per day (FRANZ & WCISLO 2003).   |
| Ectatomma<br>opaciventre  | Dead insects                                      | Solitary             | -          | 1            | ?            | ? | 2            | Recruitment: Solitary, nests in open dry savanna habitat (PIE 2004). Size: Small, can be retrieved by single ants. Space: ? Depletability: ? Frequency: Observed workers collecting dead insects repeatedly during the study (PIE 2004).  |

| Euprenolepis<br>procera | Mushrooms             | (?) Group raids?           | Nomadic    | 2<br>or<br>3 | 1<br>or<br>2 | 2<br>or<br>3 | 2 or 3       | Recruitment: Nomadic, use "foraging columns" that are most likely similar to either group raids or true raids (WITTE & MASCHWITZ 2008). Not enough information, data used only for nomadism analysis.  Size: Medium or large, numerous ants were involved in collecting mushrooms up to 40g (WITTE & MASCHWITZ 2008).  Space: Collect fungal fruiting bodies in Malaysian rainforest. Collected a subset of the available mushroom species, including those associated with the roots of specific trees, so likely patchy (WITTE & MASCHWITZ 2008).  Depletability: A single colony can harvest several mushrooms in one night, and "must therefore have a significant impact on fungal fruiting bodies". "Reduced foraging success over several consecutive days raised a colony's tendency to migrate" (WITTE & MASCHWITZ 2008).  Frequency: Sporocarps are a resources that is "short-lived, patchily distributed, and grows spatiotemporally in a highly unpredictable manner" (WITTE & MASCHWITZ 2008). |
|-------------------------|-----------------------|----------------------------|------------|--------------|--------------|--------------|--------------|--|
| Forelius pruinosus      | Small dead<br>insects | Fan                        | Polydomous | 1            | 1            | ?            | 2            | Recruitment: Workers fan out from nests in a particular direction for a few days at a time (Lanan, unpublished data).  Size: Small, can be retrieved by one ant.  Space: Collected data on this in a mowed field habitat, where small dead insects seemed to be fairly dispersed (Lanan, unpublished data).  Depletability: ?  Frequency: Fairly common, although not all ants return with food (Lanan, unpublished data).   |
| Forelius pruinosus      | EFN                   | Long-term<br>trail network | Polydomous | 2            | 3            | 1            | 1            | Recruitment: Long-term trail network in the summer when these ants are active (Lanan, personal observation).  Size: Medium, large clusters of nectaries on cacti are visited by numerous ants, which exploit a small window of time in which to collect nectar before more dominant ants return (FITZPATRICK & al. in review).  Space: Continuously secreted in the exact same location for years (LANAN & BRONSTEIN 2013).  Depletability: Foraging is unlikely to cause a decrease in nectar secretion by nectaries (Lanan, personal observation).  Frequency: secreted year-round, quite common (LANAN & BRONSTEIN 2013)  |
| Forelius pruinosus      | Trophobionts          | Long-term<br>trail network | Polydomous | 2            | 3            | 1            | 1            | Recruitment: Trail network, tend root aphids in small satellite nests at the base of plants (Lanan, personal observation).  Size: tended by multiple ants inside the nest.  Space: ?  Depletability: Ant attendance of trophobionts is unlikely to cause a decrease in the rate at which they secrete honeydew.  Frequency: Foragers are likely to find honeydew in the same location on the next foraging bout (although foraging in this case does not involve leaving the nest).  |
| Forelius pruinosus      | Large dead insect     | Short-term<br>trail        | Polydomous | 2            | 1            | 1            | 2<br>or<br>3 | Recruitment: Short-term pheromone trail to large dead grasshopper (Lanan, personal observation).  Size: Medium, multiple workers were needed to retrieve the resource, but colony was comparatively large (Lanan, personal observation).  Space: Unpredictable in space, can occur anywhere (Lanan, personal observation).  Depletability: Collection of carrion is not likely to affect the frequency at which it occurs in the future.  Frequency: Large dead insects in this habitat are not very common, perhaps occurring every week or two in the summer (Lanan, personal observation).  |
| Formica cinerea         | Honeydew              | Trunk trail                | Polydomous | 2            | 3            | 1            | 1            | Recruitment: Polydomous, trunk trails to aphids on pines (MARKÓ & CZECHOWSKI 2012).  Size: Medium, trail traffic on the pine suggests that the number of aphids must be large and that multiple ants are likely involved in tending them (MARKÓ & CZECHOWSKI 2012).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Sandy habitat with patches of plants. Aphids are concentrated on single pines (MARKÓ & CZECHOWSKI 2012).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs, called "permanent".  Frequency: Aphids were constantly tended during the study period. Called a "permanent" food patch (MARKÓ & CZECHOWSKI 2012).  |

|                     |                    |  |            | T . |   |   | Π |   |
|---------------------|--------------------|--|------------|-----|---|---|---|---|
| Formica aquilonia   | Honeydew           | (?) Long-<br>term trail<br>network or<br>trunk trail | Polydomous | 2   | 3 | ? | 1 | Recruitment: Long-term trails or trunk trails? (COSENS & TOUS-SAINT 1985, BUHL & al. 2009). Data only used for polydomy analysis.  Size: Medium, large quantities of honeydew are retrieved by many ants, suggesting that many ants are involved in tending or protecting large aggregations of insects in the trees (DOMISCH & al. 2009).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects, very predictable in space (COSENS & TOUS-SAINT 1985, BUHL & al. 2009).  Depletability:?  Frequency: Honeydew is continuously secreted and traffic on the trails is continuous (COSENS & TOUSSAINT 1985, BUHL & al. 2009), therefore it's highly likely that a forager can find honeydew in the next foraging bout.          |
| Formica cinerea     | Dead insects       | Solitary   | Polydomous | 1   | 1 | ? | ? | Recruitment: Solitary, foragers wander the foraging area with apparently random distribution (MARKÓ & CZECHOWSKI 2012).  Size: Small, can be retrieved by single ants (MARKÓ & CZECHOWSKI 2012)  Space: Food on the sand surface called "ephemeral" (MARKÓ & CZECHOWSKI 2012), it's likely that dead insects would blow around on this sand dune habitat.  Depletability: ?  Frequency: ?   |
| Formica cinerea     | Small prey         | Solitary   | Polydomous | 1   | 1 | ? | ? | Recruitment: Solitary, foragers wander the foraging area with apparently random distribution (MARKO & CZECHOWSKI 2012).  Size: Small, can be retrieved by one ant (MARKO & CZECHOWSKI 2012).  Space: food on the sand surface called "ephemeral". Measured forager distribution on sand in foraging area and found it more or less evenly distributed, so food is also probably randomly distributed (MARKÓ & CZECHOWSKI 2012).  Depletability: ?  Frequency: ?   |
| Formica fusca       | Small dead insects | Solitary   | Polydomous | 1   | 1 | ? | ? | Recruitment: Leave the nest singly without using permanent trails, foraging is diffuse or opportunistic and workers diffuse more or less randomly (SAVOLAINEN 1990).  Size: Small, can be retrieved by one ant (SAVOLAINEN 1990).  Space: Workers are searching more or less randomly (SAVOLAINEN 1990), which suggests that the food also must have a random distribution.  Depletability: ?  Frequency: ?   |
| Formica integroides | Honeydew:<br>aphid | Long-term<br>trail network                           |            | 2   | 3 | 1 | 1 | Recruitment: "Trunk trails", but more similar to a trail network (Tanner, personal communication). Nests are placed near trees with aphids (TANNER 2008).  Size: Medium, multiple ants visit honeydew patches, and are involved in defense of those patches (TANNER 2008).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Honeydew is in patches in trees, and clusters of suitable trees are separated by non-suitable trees (TANNER 2008).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs. Described as "stable and renewable resources" (TANNER 2008).  Frequency: Continuously secreted, therefore likely that a forager can find honeydew in the next foraging bout. |
| Formica integroides | Dead insects       | Solitary   | _          | 1   | ? | ? | ? | Recruitment: Solitary (TANNER 2006). Size: Small, can be retrieved by single ants. Space: Dead insects are "ephemeral" on the ground (TANNER 2006), probably randomly dispersed. Depletability: ? Frequency: ?  |
| Formica lugubris    | Honeydew:<br>aphid | Long-term<br>trail network                           | Polydomous | 2   | 3 | 1 | 1 | Recruitment: Long-term trail network and polydomy, great map (CHERIX 1980). Also use shorter-term trails, although what they lead to is unclear (paper is in French so I may have missed this info.) Size: Likely medium-sized aggregations tended by multiple ants, based on the size of the trails to patches.  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Patchy, based on map.  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.   |

|                                      |                    |                            |            |   |                   |   |   | <b>Frequency:</b> Honeydew is probably continuously secreted, and numerous patches on the map are linked by long-term trails that are stable in time (CHERIX 1980).   |
|--------------------------------------|--------------------|----------------------------|------------|---|-------------------|---|---|---|
| Formica obscuripes                   | Dead insects       | Long-term<br>trail network | Polydomous | 1 | ?                 | ? | 2 | Recruitment: These ants have a trail network and "foraged on and near trails for prey and dead insects" (O'NEILL 1988).  Size: Small, the dead insects can be retrieved by single ants.  Space: ?  Depletability: ?  Frequency: 83% of workers return without any food, suggesting that dead insects are not super common (O'NEILL 1988).   |
| Formica obscuripes                   | Honeydew:<br>aphid | Long-term<br>trail network | Polydomous | ? | 3                 | 1 | 1 | Recruitment: Polydomy and trail network with map (O'NEILL 1988). The strange parallel trails are probably due to the presence of an abandoned railroad track.  Size: ?  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Patchy in space on vegetation (map), location of homoptera-bearing plants "influences trail location" (O'NEILI 1988).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: Ants continuously visited the same locations during the study and honeydew was commonly collected (O'NEILL 1988). |
| Formica obscuripes                   | Small prey         | Long-term<br>trail network | Polydomous | 1 | ?                 | ? | 2 | Recruitment: "Foraged on and near trails for prey and dead insects" (O'NEILL 1988).  Size: Small, can be retrieved by one ant.  Space: ?  Depletability: ?  Frequency: 83% of workers return without any food, prey is most common food (SAVOLAINEN 1990).  |
| Formica pallidefulva<br>(schaufussi) | Large prey         | Group re-<br>cruitment     | -          | 2 | ?                 | ? | ? | Recruitment: Group recruitment (TRANIELLO & BESHERS 1991), scout leads the recruited group (ROBSON & TRANIELLO 1998).  Size: Medium, multiple workers needed to retrieve prey (ROBSON & TRANIELLO 1998).  Space: ?  Depletability: ?  Frequency: ?  |
| Formica pallidefulva<br>(schaufussi) | Honeydew           | Solitary                   | _          | 2 | 3                 | 1 | 2 | Recruitment: Solitary.  Size: Medium, aphid colonies are visited by multiple ants on one plant despite the lack of recruitment (TRANIELLO & al. 1991).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Ants mostly went one direction from nest (map of individual routes), mainly to a single oak tree where there were aphids (TRANIELLO & al. 1991).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: 83% of workers return without any food, honeydew is less common than prey (TRANIELLO & al. 1991).      |
| Formica pallidefulva<br>(schaufussi) | Small prey         | Solitary                   | -          | 1 | 1<br>or<br>2<br>? | ? | ? | Recruitment: Solitary (TRANIELLO & BESHERS 1991, TRANIELLO & al. 1991).  Size: Small, can be retrieved by one ant.  Space: Ants search the whole area around nest (map of individual routes), probably dispersed, but possibly somewhat patchy?  (TRANIELLO & BESHERS 1991, TRANIELLO & al. 1991).  Depletability: ?  Frequency: ?  |
| Formica planipilis                   | Honeydew           | Trunk trails               | Polydomous | ? | 3                 | 1 | 1 | Recruitment: Trunk trails that radiate out from the nest, rarely polydomous (McIver & Loomis 1993).  Size: ?  Space: Collect honeydew from aphids on most of the common plants in sagebrush scrub habitat (McIver & Loomis 1993). Ants visit the same location repeatedly to collect honeydew from the same insects, probably very spatially predictable.  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: Paper implies that that honeydew is secreted consistently over time, therefore could be found on the next foraging bout in the same location.   |
| Formica polyctena                    | Honeydew: aphids   | Trunk trail                | Polysomoua | ? | 3                 | 1 | 1 | Recruitment: Trunk trails (SAVOLAINEN 1990). Size: ? Space: Ants visit the same location repeatedly, very predictable location.   |

|                            |                 |                                    |            |                   |              |   |   | Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: Continuously secreted, therefore likely that a forager can find honeydew in the next foraging bout.  |
|----------------------------|-----------------|------------------------------------|------------|-------------------|--------------|---|---|---|
| Formica rufa               | Honeydew        | Trunk trail                        | Polydomous | 2<br>or<br>3<br>? | 3            | 1 | 1 | Recruitment: "Permanent" trunk trails, map (SKINNER 1980b). Size: Likely to be medium or large, because honeydew is the main energetic source for the colony (SKINNER 1980a, b). Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Woodland, in which most of the tree contain patches that are foraged on by ants (SKINNER 1980b). Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs, and ants collected it continuously. Frequency: Continuously secreted and very common on most trees, therefore likely that a forager can find honeydew in the next foraging bout.   |
| Formica xerophila          | Honeydew: aphid | Long-term<br>trail network         | _          | 2                 | 3            | 1 | 1 | Recruitment: "Trunk trails", but more similar to a trail network (Tanner, personal communication). Nests are placed near trees with aphids.  Size: Medium, multiple ants visit honeydew patches, and are involved in group defense of those patches (TANNER 2006).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Insects are patchy in trees, and clusters of suitable trees are separated by non-suitable trees (TANNER 2006).  Depletability: Honeydew is a "stable and renewable resource" (TANNER 2006).  Frequency: Continuously secreted, therefore likely that a forager can find honeydew in the next foraging bout.   |
| Gigantiops<br>destructor   | EFN             | Solitary                           | Polydomous | ?                 | 2<br>or<br>3 | 1 | ? | Recruitment: Solitary foragers on ground and in vegetation (BEUGNON & al. 2001).  Size: ?  Space: Extrafloral nectaries secrete over a period of time and occur on particular plants, so the next droplet is likely to occur in the same place or on a nearby nectary.  Depletability: Foraging is unlikely to cause a decrease in nectar secretion by nectaries.  Frequency: ?   |
| Gigantiops<br>destructor   | Small prey      | Solitary                           | Polydomous | 1                 | ?            | 1 | 2 | Recruitment: Solitary foragers on ground and in vegetation (BEUGNON & al. 2001). Hunt on vegetation at forest edges and along streams, can leap to catch flying insects. Especially like to capture termites (BEUGNON & al. 2001).  Size: Small, can be retrieved by one ant (BEUGNON & al. 2001).  Space: ?  Depletability: Unlikely to be depleted, because at least some of the captured prey are coming in from elsewhere (BEUGNON & al. 2001).  Frequency: Observed numerous prey captures during study (BEUGNON & al. 2001).  |
| Gnamptogenys<br>menadensis | Small prey      | Trunk trails (?)                   | _          | 1                 | 2 ?          | ? | ? | Recruitment: The description sounds very much like harvester ant trunk trails. Trails lead out from the nest through the 3D tree canopy. Ants hunt solitarily at the end, and then use trails to help navigate home (GOBIN & al. 1998). Authors do not say how long trails last, but the implication is that they are somewhat long-lasting. Size: Small, can be retrieved by one ant.  Space: Trails enhanced forager visitation to certain patches on shrubs. Patchy?  Depletability: ?  Frequency: ?   |
| Iridomyrmex conifer        | Honeydew        | (?) Long-<br>term trail<br>network | Polydomous | 3                 | 3            | 1 | 1 | Recruitment: Polydomous, nets near honeydew patches interconnected by short trails (SHATTUCK & McMillan 1998). Not enough information to describe foraging strategy, data only used for polydomy analysis.  Size: Large. If the current honeydew source is destroyed, the entire nest will move to be near a new plant with homopteran aggregations (SHATTUCK & McMillan 1998).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects on the same plants over time.  Depletability: Collection of honeydew does not decrease the rate at which it occurs.  Frequency: Continuously secreted, therefore likely that a forager can find honeydew in the next foraging bout on the same plant, which is frequently visited (SHATTUCK & McMillan 1998). |

| Iridomyrmex conifer       | Floral nectar | (?) Trails, type?             | Polydomous | ?            | 2<br>or<br>3 | 1<br>or<br>2 | or 2         | Recruitment: Ants will move nests near plants that are flowering (SHATTUCK & MCMILLAN 1998). Data used for polydomy analysis only.  Size: Patch is large enough to be worth moving the entire nest for (SHATTUCK & MCMILLAN 1998).  Space: Patches of flowers, single flowers may stop producing nectar but others are likely to occur nearby throughout the flowering season. When the plant stops flowering the ants will sometimes move the nest to a new plant (SHATTUCK & MCMILLAN 1998).  Depletability: Ants might be able to temporarily decrease the standing nectar crop if nectar in individual flowers is replenished, but more flowers will open.  Frequency: Commonly used resource during several months of the year, likely to be at least somewhat frequent. |
|---------------------------|---------------|-------------------------------|------------|--------------|--------------|--------------|--------------|---|
| Iridomyrmex<br>purpureus  | Honeydew      | Long-term<br>trail network    | Polydomous | 2<br>or<br>3 | 3            | 1            | 1            | Recruitment: Trail network with polydomy, trails leading to trees with homopterans. Map (VAN WILGENBURG & ELGAR 2007).  Size: medium or large aggregations of insects, requiring numerous ants to visit the resource and collect honeydew (VAN WILGENBURG & ELGAR 2007).  Space: Keep a well defined trail to eucalyptus trees where they tend homopterans (GREAVES & HUGHES 1974). Trees and aggregations are patchy in the habitat.  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: Food sources persisted on the same trees for months to years, were common (GREAVES & HUGHES 1974).  |
| Iridomyrmex<br>purpureus  | Small prey    | Solitary                      | Polydomous | 1            | 1            | ?            | ?            | Recruitment: A small subset of workers forage around the nest on the ground for dead insects and prey. Most likely solitary foraging, although they don't directly call it this (GREAVES & HUGHES 1974).  Size: Small, can be retrieved by one ant.  Space: This food source is "expected to have a more uniform spatial distribution" compared to honeydew, although they don't take measurements (VAN WILGENBURG & ELGAR 2007).  Depletability: ?  Frequency: ?   |
| Iridomyrmex<br>sanguineus | Honeydew      | Long-term<br>trail<br>network | Polydomous | ?            | 3            | 1            | 1            | Recruitment: Polydomy with trail network leading to trees with honeydew, map (MCIVER 1991).  Size: ?  Space: Ants visit the same location repeatedly to collect honeydew from the same insects in trees, which are patchy on the map (MCIVER 1991).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: Ants continuously visit the patches, suggesting honeydew is common and continuously secreted (MCIVER 1991).   |
| Labidus praedator         | Ant nest      | Raid                          | Nomadic    | 2            | ?            | ?            | 2            | Recruitment: Raid, nomadic, but bivouacs can stay in one place up to 8 months. Map shows raids radiating outward from nest site in various directions over time (FOWLER 1979).  Size: Prefer to attack species with smaller or medium colonies (FOWLER 1979)  Space: ?  Depletability: ?  Frequency: Small or medium ant nests in the rainforest litter are fairly common, likely that raids will find new sources on subsequent foraging bouts before the colony moves. This is also supported by the colony staying in one place for 8 months.  |
| Labidus praedator         | Small prey    | Raid                          | Nomadic    | 1<br>or<br>2 | ?            | 3            | 1<br>or<br>2 | Recruitment: Raids in grassland, forest (KASPARI & al. 2011).  Size: Small or medium, some prey are retrieved by several ants.  Space: ? Search thoroughly through litter rather than focusing on patches (KASPARI & al. 2011).  Depletability: Reduces biomass of litter arthropods after a raid by 25%, up to 75% in some groups (KASPARI & al. 2011).  Frequency: If raids progress in different directions on different days, it is likely that raids will find more small prey on subsequent foraging bouts before the colony moves.   |
| Lasius fuliginosus        | Large prey    | Short-term<br>trails          | _          | 2            | 1            | ?            | 2<br>or<br>3 | Recruitment: Short-term trails, demonstrated with baits, but also observed trails frequently to earthworms (QUINET & al. 1997) Size: Medium, multiple workers needed to retrieve prey. Space: Prey are "unpredictable and non-persistent food sources scattered over large ground areas" (QUINET & al. 1997) Depletability: ? Frequency: Paper implies that large prey are not very common.   |

| Lasius fuliginosus   | Honeydew                      | Trunk trail                | _          | ? | 3            | 1 | 1            | Recruitment: "Permanent trunk trails which remain virtually unchanged for several years", map shows arrangement more similar to trunk trails than a network, although multiple sites are strung along each trail (QUINET & al. 1997).  Size: ?  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Honeydew from aphid colonies on trees were "highly stable" and located in the same places for years (QUINET & al. 1997).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: Continuously secreted (QUINET & al. 1997), therefore very likely that a forager can find honeydew in the next foraging bout.  |
|----------------------|-------------------------------|----------------------------|------------|---|--------------|---|--------------|--|
| Lasius neoniger      | Honeydew:<br>root aphids      | Long-term<br>trail network | Polydomous | ? | ?            | 1 | 1            | Recruitment: Nests and areas with root aphids are linked underground by a network of subterranean trails (BUCZKOWSKI 2012).  Size: ?  Space: Ants visit the same location repeatedly to collect honeydew from the same insects on roots underground, likely patchy?  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: Commonly used resource on many plant roots.  |
| Lasius neoniger      | Dead insects                  | Short-term<br>trails       | Polydomous | 2 | ?            | ? | 1<br>or<br>2 | Recruitment: Short-term trails (TRANIELLO 1983). Size: Medium, food is retrieved cooperatively and is handled by several ants. Space: ? Depletability: ? Frequency: 85% of prey is retrieved cooperatively (TRANIELLO 1983), multiple observations of dead insect retrieval were made suggesting that the food is at least somewhat common.  |
| Lasius neoniger      | Dead insects                  | Trunk trails               | Polydomous | 1 | ?            | ? | 2            | Recruitment: Workers leave the nest on trunk trails but depart from the trails at different points to hunt solitarily (TRANIELLO 1980). These trunk trails are apparently on the surface, while trail network is underground (TRANIELLO 1983).  Size: Small, can be retrieved by single ants.  Space: ?  Depletability: ?  Frequency: 15% of prey is small enough to retrieve solitarily, was observed multiple times (TRANIELLO 1980).  |
| Lasius neoniger      | Dead insects                  | Volatile<br>recruitment    | Polydomous | 2 | ?            | ? | 1<br>or<br>2 | Recruitment: Worker circles prey dragging gaster, nearby workers come to help move prey (TRANIELLO 1983).  Size: Medium, multiple workers are needed to retrieve the item.  Space: ?  Depletability: ?  Frequency: 85% of prey is retrieved cooperatively, prey retrieval was observed many times (TRANIELLO 1983).  |
| Leptogenys chinensis | Group of small prey: termites | Group re-<br>cruitment     | Nomadic    | 2 | 1<br>or<br>2 | ? | ?            | Recruitment: Group recruitment, groups of 2-12 workers are led to the location of the termites by a scout along a pheromone trail (MASCHWITZ & SCHONEGGE 1977, 1983). Emigrate frequently, fairly nomadic (MASCHWITZ & SCHONEGGE 1983).  Size: Medium, several ants are needed to capture the termites.  Space: Describes a scout finding a "feeding place" of termites in the field (MASCHWITZ & SCHONEGGE 1977). These patches are likely to be unpredictable in space or only somewhat patchy, because termite foraging galleries change location over time.  Depletability: ?  Frequency: ?  |
| Leptogenys nitida    | Small prey                    | Raid                       | Nomadic    | 1 | 1<br>or<br>2 | ? | ?            | Recruitment: Nomadic, raiding in groups of up to 500, not led by a scout. Scouts do apparently explore area before raids depart, but marking showed that they are not involved in leading the raids. The advancement of the column was described as similar to the behavior of <i>Eciton burchelli</i> , and at the end of the discussion the authors say that this group hunting behavior is more similar to that of true army ants. Accordingly, I've classified it as raiding, although it's really somewhat in-between. Reference has map of raid routes (DUNCAN & CREWE 1994b).  Size: Small, prey can be carried by one ant. Not clear that the other ants are necessary for capture (DUNCAN & CREWE 1994b).  Space: Fan out, search through the litter for prey (small arthropods), which are a "dispersed food source". Elsewhere authors also suggest prey might occur in small patches (DUNCAN & CREWE 1994b).  Depletability: ?  Frequency: ? |

| Leptogenys sp. 13<br>(near kraepelini) | Small prey:<br>earwigs | Solitary                   | Nomadic    | 1 | ? | ? | 2 ?          | Recruitment: Solitary, nomadic (STEGHAUS-KOVAC & MASCH-WITZ 1993). Size: Small, can be retrieved by one ant. Space: ? Depletability: ? Frequency: Presumably at least somewhat common, since this is the only food they collect (STEGHAUS-KOVAC & MASCHWITZ 1993).  |
|--|------------------------|----------------------------|------------|---|---|---|--------------|---|
| Linepithema humile                     | Honeydew               | Long-term<br>trail network | Polydomous | 2 | 3 | 1 | 1            | Recruitment: Uses trails to patches of honeydew (ROWLES & SIL-VERMAN 2010) map of the trail network (HELLER & al. 2008). Use other food resources as well, but no info on how they are collected.  Size: Medium. The trail traffic on pines leading to honeydew sources is fairly high, suggesting that multiple ants are involved in tending patches of Homoptera (ROWLES & SILVERMAN 2010).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Likely to be patchy on trees in the case of pines (ROWLES & SILVERMAN 2010).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: Continuously secreted, therefore likely that a forager can find honeydew in the next foraging bout. Trail traffic was continuous (ROWLES & SILVERMAN 2010). |
| Liometopum<br>apiculatum               | Honeydew               | Long-term<br>trail network | Polydomous | 2 | 3 | 1 | 1            | Recruitment: trails that persist several years (SHAPLEY 1920), trail network and polydomy (Lanan, personal observation).  Size: Trail traffic up trees is very high and many heavily laden ants return, suggesting that ants are tending large aggregations (Lanan, personal observation).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects over the season (Lanan, personal observation).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs and might increase it, because ants aggressively defend trees (Lanan, personal observation).  Frequency: Continuously secreted, ants can be found collecting large amounts from the same trees over months (Lanan, personal observation).  |
| Liometopum<br>occidentale              | Honeydew               | Long-term<br>trail network | Polydomous | 2 | 3 | 1 | 1            | Recruitment: Trails that persist several years (SHAPLEY 1920), trail networks and polydomy (Lanan, personal observation).  Size: Trail traffic up trees is very high and many heavily laden ants return, suggesting that ants are tending large aggregations (Lanan, personal observation).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects over the season (Lanan, personal observation).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs and might increase it, because ants aggressively defend trees (Lanan, personal observation).  Frequency: Continuously secreted, ants can be found collecting large amounts from the same trees over months (Lanan, personal observation).   |
| Melophorus bagoti                      | Dead insects           | Solitary                   | -          | 1 | 1 | ? | 2<br>or<br>3 | Recruitment: Forage solitarily, mostly for dead insects. Have honeypots, but unclear what liquid foods they might be collecting (MUSER & al. 2005).  Size: Small, can be retrieved by single ants.  Space: Forage in low shrubs, arid grassland. Dead insects are described as having "spatial unpredictability" (MUSER & al. 2005).  Depletability: ?  Frequency: Foraging success for individual trips was less than 20%. Due to this low success rate, only half the foragers are successful more than once in their lifetime. This is suggestive of a very low food density (MUSER & al. 2005)  |
| Melophorus sp.                         | Dead insects           | Solitary                   | _          | 1 | 1 | 1 | 2<br>or<br>3 | Recruitment: Solitary collection of dead insects (SCHULTHEISS & al. 2012), can make "veritable trails" to shrubs to collect plant parts, but unclear what this means.  Size: Small, can be retrieved by single ants.  Space: Hunt on the featureless desert salt pan. Dead insects are "corpses of flying insects that had perished and been blown out onto the salt lake" (SCHULTHEISS & al. 2012)  Depletability: Unlikely to be depleted, since insects are blowing into habitat from outside the foraging range.  Frequency: This food is somewhat uncommon, 18% foraging trip success rate (SCHULTHEISS & al. 2012).   |
| Messor andrei                          | Seeds                  | Columns                    | -          | 1 | 2 | 1 | 1            | <b>Recruitment:</b> Use column recruitment, but where they decide to forage is apparently not related to resource density as the authors measured it (BROWN & GORDON 2000).   |

|                           |                                  |             |            |   |   |   |              | Size: Small, can be retrieved by one ant.  Space: Grassland habitat. They measured seed abundance across space and found 1000-fold differences between different parts of the foraging range, however this did not seem to influence which areas colonies foraged in (BROWN & GORDON 2000).  Depletability: Baiting experiments suggest that the ants were "not competing for a limited resource". The number of seeds in one 1 × 1 plot would be depleted in 70 days of average foraging effort, but most 1 × 1 plots received only 10 days of foraging in a year (BROWN & GORDON 2000).  Frequency: "Spatially and temporally heterogeneous", 1 × 1 m plots contained 250000 seeds on average, differed only slightly for different seasons (BROWN & GORDON 2000).                                       |
|---------------------------|----------------------------------|-------------|------------|---|---|---|--------------|--|
| Messor barbarus           | Seeds                            | Trunk trail | Polydomous | 1 | 2 | ? | 1<br>or<br>2 | Recruitment: Trunk trails (LOPEZ & al. 1993).  Size: Small, can be retrieved by one ant.  Space: Seeds are patchy in this grassland habitat (map, measure of seed density) (LOPEZ & al. 1993), colonies forage more intensely in certain patches (AZCARATE & PECO 2003).  Depletability: ?  Frequency: Amount of seeds varied from year to year, but ants generally collected a lot (LOPEZ & al. 1993).  |
| Messor bouvieri           | Seeds                            | Columns     | _          | 1 | 2 | ? | 1            | Recruitment: Trunk trails (WILLOTT & al. 2000), temporary, less-defined trails than the trunk trails of <i>M. barbarous</i> (AZCARATE & PECO 2003), columns (PLOWES & al. 2013).  Size: Small, can be retrieved by one ant.  Space: Ants are collecting newly-produced seeds that fall to the ground, rather than seeds turned out of the soil. Seed rain traps suggest seeds are somewhat patchy (WILLOTT & al. 2000). Unlikely that these ants forage in wetter patches near the dry habitat where they nest due to the shorter trails, so seeds are likely to be more uniform (AZCARATE & PECO 2003).  Depletability: ?  Frequency: Foragers are likely to find another seed on the next foraging bout. Seeds are common, researchers collected 1500 items from ants during study (WILLOTT & al. 2000). |
| Messor ebeninus           | Seeds                            | Trunk trail | -          | 1 | 2 | ? | 2            | Recruitment: Trails, presumably trunk trails (KUNIN 1994).  Size: Small, can be retrieved by one ant.  Space: Seeds fall onto a soil crust, where they do not penetrate but instead blow around and are collected in patches such as cracks, under shrubs, etc. (NICOLAI & BOEKEN 2012).  Depletability: ?  Frequency: Seed density is presumed to be low at time of study because seeds were shed many months previously (KUNIN 1994). At other times seeds would presumably be more frequent.  |
| Messor minor              | Seeds                            | Trunk trail | -          | 1 | ? | ? | 1            | Recruitment: Trunk trails (SOLIDA & al. 2010). Size: Small, can be retrieved by one ant (SOLIDA & al. 2010). Space: Grassland, distributed? (SOLIDA & al. 2010). Depletability: ? Frequency: Common, collected a variety of seeds from returning workers (SOLIDA & al. 2010).  |
| Messor wasmanni           | Seeds                            | Trunk trail | Polydomous | 1 | ? | ? | 1<br>or<br>2 | Recruitment: Trunk trails (SOLIDA & al. 2010). Size: Small, can be retrieved by one ant (SOLIDA & al. 2010). Space: Grassland, probably distributed? (SOLIDA & al. 2010). Depletability: ? Frequency: Common, collected a variety of seeds from returning workers (SOLIDA & al. 2010).   |
| Metapone<br>madagascarica | Small prey:<br>single<br>termite | Solitary    | _          | 1 | ? | 1 | ?            | Recruitment: Specialist predators of termites, nesting in the same large logs as the termite nests. Solitary retrieval of single termites (HÖLLDOBLER & al. 2002).  Size: Small, can be retrieved by one ant.  Space: ?  Depletability: Colony is small relative to termite colony, so unlikely to deplete prey.  Frequency: ?   |
| Monomorium<br>minimum     | Dead insects                     | Solitary    | -          | 1 | ? | ? | 1            | Recruitment: Solitary (ADAMS & TRANIELLO 1981). Size: Small, can be retrieved by single ants. Space: ? Depletability: ? Frequency: Common, in a single day a colony retrieved 141 items weighing 11 mg (ADAMS & TRANIELLO 1981).   |

|                          |                                      |                        |   | _ | _ | _ | _            |   |
|--------------------------|--------------------------------------|------------------------|---|---|---|---|--------------|---|
| Myrmecia brevinoda       | Small prey                           | Solitary               | - | 1 | ? | ? | 2            | Recruitment: Solitary foraging around nest (HIGASHI & PEETERS 1990). Size: Small, can be retrieved by one ant. Space: ? Depletability: ? Frequency: They observed a variety of prey items brought back to the nest (HIGASHI & PEETERS 1990).  |
| Myrmecia comata          | Small prey                           | Solitary               | - | 1 | ? | 1 | ?            | Recruitment: Solitary, sit and wait predators in trees where they catch landing cicadas (GRAY 1974).  Size: Small relative to ant, can be retrieved by one ant (GRAY 1974).  Space: ?  Depletability: Unlikely to be depletable, because ants are primarily capturing flying insects that come in to land on the tree (GRAY 1974).  Frequency: ?  |
| Myrmecia<br>desertorum   | Floral nectar                        | Solitary               | _ | 1 | 2 | 1 | ?            | Recruitment: Solitary, hunt on trees and may visit several trees in one trip (GRAY 1971).  Size: Single ants can retrieve floral nectar (GRAY 1971), apparently multiple ants are not necessary to defend the resource.  Space: Patches of flowers occur on particular trees (GRAY 1971). Single flowers may stop producing nectar but others are likely to occur nearby during the flowering period.  Depletability: Foraging is unlikely to cause a decrease in nectar secretion by future flowers within the timespan of a forager's life.  Frequency: ?   |
| Myrmecia<br>desertorum   | Honeydew                             | Solitary               | - | ? | 3 | ? | ?            | Recruitment: Solitary (GRAY 1971). Size: ? Space: Ants visit the same location repeatedly to collect honeydew, predictable in space. Depletability: ? Frequency: ?  |
| Myrmecia<br>desertorum   | Small prey                           | Solitary               | - | 1 | 2 | ? | 1            | Recruitment: Solitary (GRAY 1971). Size: Small, can be retrieved by one ant. Space: ? Depletability: Somewhat patchy, located on trees in the foraging range (GRAY 1971). Frequency: Workers typically found prey and returned in 30 - 90 minutes (GRAY 1971).  |
| Myrmecia varians         | Small prey                           | Solitary               | - | 1 | ? | 1 | ?            | Recruitment: Hunt psyllids on trees, sit and wait predators (GRAY 1974).  Size: Small, can be retrieved by one ant (GRAY 1974).  Space: ?  Depletability: Unlikely to be depletable, because ants are primarily capturing flying insects that come in to land on the tree (GRAY 1974).  Frequency: ?  |
| Myrmecocystus<br>mimicus | Floral nectar                        | Group re-<br>cruitment |   | 1 | 2 | 1 | 1            | Recruitment: Group recruitment (HÖLLDOBLER 1981).  Size: Single flowers are small and contain an amount of nectar that one ant could collect. Although numerous flowers often occur on the same bush close together and multiple workers are involved in collection (HÖLLDOBLER 1981), multiple workers are most likely not necessary to protect, process, or subdue the resource. This case seems to differ from many (but not all) cases of honeydew where groups of ants do actively defend the aphids.  Space: Flowers are described as patches on particular bushes (hackberry) and are numerous (HÖLLDOBLER 1981). Single flowers may stop producing nectar but others are likely to occur nearby on the plant. Depletability: Foraging is unlikely to cause a decrease in nectar secretion by future flowers within the timespan of a forager's life.  Frequency: Flowers are numerous, therefore likely that a forager can find nectar in next foraging bout. |
| Myrmecocystus<br>mimicus | Groups of<br>small prey:<br>termites | Group recruitment      | _ | 2 | 1 | ? | 1<br>or<br>2 | Recruitment: Group recruitment to groups of termites (HÖLL-DOBLER 1981).  Size: Medium, several ants are needed to capture the termites.  Space: Groups of termites are found in the soil or in dried cow dung. Described as occurring in patches that are temporally and spatially unpredictable (HÖLLDOBLER 1981).  Depletability: ?  Frequency: Commonly retrieved (928 termites in 27 hours) (HÖLL-DOBLER 1981), although described as temporally unpredictable, they can be found easily during the monsoon season when the ants collect them (Lanan, personal observation).  Colony size: ?   |

| Neivamyrmex<br>compressinodis | Ant nest          | Raid                       | Nomadic    | 2 | ? | 3 | 1<br>or<br>2 | Recruitment: Raids, attacks <i>Wasmannia auropunctata</i> nests.  Size: Medium, <i>Wasmannia</i> colonies are highly polydomous with distributed nests. Individual nests are not huge.  Space: ?  Depletability: Leave behind only 15% of a colony's brood. Authors suggest in the discussion that lower numbers of <i>Wasmannia</i> in native range are due to suppression by <i>Neivamyrmex</i> (LE BRETON & al. 2007)  Frequency: Observations of 12 field colonies showed that they attacked >100 <i>Wasmannia</i> nests, which are apparently quite common in the habitat (LE BRETON & al. 2007)   |
|-------------------------------|-------------------|----------------------------|------------|---|---|---|--------------|---|
| Neivamyrmex<br>nigrescens     | Ant nest          | Raid                       | Nomadic    | 2 | ? | 2 | ?            | Recruitment: Raids (TOPOFF & MIRENDA 1980) Size: Typically raid small or medium sized ant nests in the soil (Lanan, personal observation in Chiricahua Mts.). Space: ? Depletability: Supplementing food prevented colonies from moving, suggesting that nomadism is in response to local food depletion, so resource must be at least somewhat depletable (TOPOFF & MIRENDA 1980). Frequency: ?  |
| Neivamyrmex<br>rugulosus      | Ant nest          | Raid                       | Nomadic    | 2 | 1 | 3 | 1 or 2       | Recruitment: Raids <i>Trachymyrmex</i> nests (TOPOFF & MIRENDA 1980, LAPOLLA & al. 2002).  Size: Medium, <i>Trachymyrmex</i> nests are not very large and multiple nests can be raided at once (Lanan, personal observation).  Space: <i>Trachymyrmex</i> nests are dispersed throughout the habitat (Lanan, personal observation at the same study site as the one used in the paper).  Depletability: The raid destroyed most of the brood and fungus garden of raided nests (LAPOLLA & al. 2002), suggesting that raiding could deplete an area for a while.  Frequency: <i>Trachymyrmex</i> nests are very common at this site, with dozens or hundreds of nests per hectare (LAPOLLA & al. 2002). It's therefore very likely that raids will find new sources on subsequent foraging bouts in the same area before the colony moves. |
| Nomamyrmex<br>esenbeckii      | Ant nest (Atta)   | Raid                       | Nomadic    | 3 | ? | 3 | 3            | Recruitment: Raids (SWARTZ 1998).  Size: Large, attacks entire <i>Atta</i> nests (SWARTZ 1998).  Space: ?  Depletability: An entire <i>Atta</i> nest was destroyed (SWARTZ 1998).  This resource will not re-occur in the same area until the nest either recovers or a new colony is established.  Frequency: <i>Atta</i> nests are widely distributed (Lanan, personal observation) and it is unlikely that more than one would occur in the foraging range of an army ant colony before it migrated.   |
| Nylanderia fulva              | Trophobionts      | Long-term<br>trail network | Polydomous | 2 | 3 | 1 | 1            | Recruitment: Very polydomous with trail network, build carton shelters over trophobionts (SHARMA & al. 2013).  Size: Multiple ants are likely involved in building the shelters and tending the insects.  Space: ?  Depletability: Ant attendance of trophobionts is unlikely to cause a decrease in the rate at which they secrete honeydew.  Frequency: Foragers are likely to find honeydew in the same location on the next foraging bout (although foraging in this case does not involve leaving the nest). Very common, tend a number of different species.  |
| Ochetellus flavipes           | Trophobionts      | Long-term<br>trail network | -          | ? | 3 | 1 | 1            | Recruitment: Make a trail network of covered runways with resin and rocks from nest to grass hummocks where they build shelters and tend trophobionts (MORTON & CHRISTIAN 1994).  Size: ?  Space: Patchy, grass hummocks are separated by barren sand (MORTON & CHRISTIAN 1994).  Depletability: Ant attendance of trophobionts is unlikely to cause a decrease in the rate at which they secrete honeydew.  Frequency: Foragers are likely to find honeydew in the same location on the next foraging bout (although foraging in this case does not involve leaving the nest)  |
| Ocymyrmex barbiger            | Large dead insect | Group re-<br>cruitment     | _          | 2 | 1 | ? | 2<br>or<br>3 | Recruitment: Describe group recruitment, with a scout leading, to a dead caterpillar (MARSH 1985).  Size: Medium, multiple workers were needed to retrieve resource.  Space: Dead insects are a "low density, spatially unpredictable resource" (MARSH 1985).  Depletability: ?   |

|                          |                           |                            |            |   |   |   |              | Frequency: "low density" implying that dead insects are uncommon. Large dead insects were even less common and this was only observed once (MARSH 1985).  |
|--------------------------|---------------------------|----------------------------|------------|---|---|---|--------------|---|
| Ocymyrmex barbiger       | Dead insects              | Solitary                   | -          | 1 | 1 | 1 | ?            | Recruitment: Searches solitarily across expanses of sandy river bed for dead, dessicated insects (MARSH 1985).  Size: Small, can be retrieved by single ants.  Space: "Low density, spatially unpredictable resource" (MARSH 1985).  Depletability: Unlikely to be depleted, since insects are blowing or falling into habitat from outside the foraging range.  Frequency: Prey density increased during hot, dry conditions, probably because more insects were falling victim to the heat (MARSH 1985).  |
| Odontomachus<br>chelifer | Dead insects              | Solitary                   | -          | 1 | 1 | ? | ?            | Recruitment: Solitary (RAIMUNDO & al. 2009).  Size: Small, can be retrieved by single ants.  Space: Prey are "dispersed unpredictably in space and time" (RAIMUNDO & al. 2009).  Depletability: ?  Frequency: ?   |
| Odontomachus<br>chelifer | Small prey                | Solitary                   | -          | 1 | 1 | ? | ?            | Recruitment: Solitary (RAIMUNDO & al. 2009). Size: Small, can be retrieved by one ant. Space: Prey are "dispersed unpredictably in space and time" (RAIMUNDO & al. 2009). Depletability: ? Frequency: ?   |
| Oecophylla<br>longinoda  | Honeydew                  | Long-term<br>trail network | Polydomous | 2 | 3 | 1 | 1            | Recruitment: Long-term trails can be detected after nine weeks of abandonment (BEUGNON & DEJEAN 1992) trail network and polydomy (DEJEAN & BEUGNON 1991).  Size: Medium, multiple ants tend and defend aggregations (WAY 1954)  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Scale insects on clove trees live in large aggregations both inside the Oecophylla nests and on the branches (WAY 1954).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs, and ants actively protect the insects.  Frequency: Continuously secreted, therefore likely that a forager can find honeydew in the next foraging bout at the same location (WAY 1954). |
| Oecophylla<br>smaragdina | Tropho-<br>bionts         | Long-term<br>trail network | Polydomous | 2 | 3 | 1 | 1            | Recruitment: Coccids are kept inside the nests where they are tended by minor workers. Polydomous (HÖLLDOBLER 1983).  Size: Tended by multiple ants inside the nest.  Space: ?  Depletability: Ant attendance of trophobionts is unlikely to cause a decrease in the rate at which they secrete honeydew.  Frequency: ?   |
| Oecophylla<br>smaragdina | Large prey                | Short-term trails          | Polydomous | 2 | ? | ? | 2            | Recruitment: Short-term trails (HÖLLDOBLER 1983). Size: Medium, multiple workers needed to capture and retrieve prey Space: ? Depletability: ? Frequency: Reports that they encounter large prey fairly frequently (HÖLLDOBLER 1983).   |
| Oecophylla<br>smaragdina | Large prey                | Volatile re-<br>cruitment  | Polydomous | 2 | ? | ? | 2            | Recruitment: Volatile recruitment brings nearby workers to large prey (cockroaches) (HÖLLDOBLER 1983).  Size: Medium, multiple workers needed to retrieve prey (HÖLLDOBLER 1983).  Space: ?  Depletability: Reports that they encounter large prey fairly frequently (HÖLLDOBLER 1983).  Frequency: ?   |
| Onychomyrmex<br>hedleyi  | Large prey:<br>centipedes | Raid                       | Nomadic    | 3 | ? | ? | 2<br>or<br>3 | Recruitment: Column raids and nomadism. If the entire prey is too large, the colony moves to it (MIYATA & al. 2009).  Size: Large, the entire colony sometimes moves to the prey item rather than retrieve it.  Space: ?  Depletability: ?  Frequency: Centipedes are "distributed at low density" (MIYATA & al. 2003).   |

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|--|--------------------------------------|-------------|------------|-----|--------------|--------------|--------------|---|
| Pachycondyla analis<br>(Megaponera<br>foetens)               | Groups of<br>small prey:<br>termites | Group raid  | Nomadic    | 3   | 1<br>or<br>2 | 2<br>or<br>3 | 1            | Recruitment: Nomadic (stayed in one place 25 days). Uses foraging paths repeatedly, along which groups set out in raid-like foraging columns of 20 - 120 ants led by a scout (LONGHURST & HOWSE 1979).  Size: Large, an average of 690 termites are collected per raid, by an average of 267 ants (LONGHURST & HOWSE 1979).  Space: Productive patches of termite foraging galleries were visited repeatedly, but they could occur throughout the foraging range (LONGHURST & HOWSE 1979).  Depletability: A particular area with termites could be foraged several times, however by the end of the 25 days the authors stated that they believed termites had been depleted from the foraging area significantly (LONGHURST & HOWSE 1979).  Frequency: Common: 113 successful raids in 25 days (BAYLISS & FIELDING 2002). |
| Pachycondyla<br>commutata                                    | Groups of small prey: termites       | Group raid  | -          | 3   | 1            | ?            | ?            | Recruitment: Large columns form but are led by a scout, spread out at the end. This is a very raid-like form of group raiding, but columns failed if the scout was removed. Typical columns had 20 - 117 workers (MILL 1984).  Size: Large, ants attack foraging columns of several hundred termites (MILL 1984). Large numbers of ants are involved in termite retrieval.  Space: Termite nests are distributed throughout the habitat, from which foraging parties of termites depart at night to cut leaves in the forest. Likely to be unpredictable in space (MILL 1984).  Depletability: ?  Frequency: ?  |
| Pachycondyla<br>havilandi (Hagensia<br>havilandi)            | Dead insects                         | Solitary    | _          | 1   | 1            | ?            | 2            | Recruitment: Solitary (DUNCAN & CREWE 1994a). Size: Small, can be retrieved by single ants. Space: Forage in leaf litter, where "insects are a dispersed resource" (DUNCAN & CREWE 1994a). Depletability: ? Frequency: 37% foraging success rate (DUNCAN & CREWE 1994a).  |
| Pachycondyla<br>havilandi (Hagensia<br>havilandi)            | Small prey                           | Solitary    | _          | 1   | 1            | ?            | 2            | Recruitment: Solitary (DUNCAN & CREWE 1994a). Size: Small, can be retrieved by one ant. Space: Forage in leaf litter, "insects are a dispersed resource" (DUNCAN & CREWE 1994a). Depletability: ? Frequency: 37% foraging success rate (DUNCAN & CREWE 1994a).  |
| Pachycondyla<br>marginata                                    | Groups of<br>small prey:<br>termites | Group raid  | Polydomous | 2   | ?            | 1            | 1<br>or<br>2 | Recruitment: Polydomous, called "raiding", although actually group raids of 10 - 30 ants initially led by a scout. Recruitment may become more similar to short-term trails later in the process. Called "migratory", possibly nomadic? (LEAL & OLIVEIRA 1995, ACOSTA-AVALOS & al. 2001)  Size: Medium, several ants are needed to capture the termites.  Space: ?  Depletability: Re-use of routes to the same termite nest apparently does not cause prey depletion over time (LEAL & OLIVEIRA 1995).  Frequency: Termite nests at density of one every 3 m along transects, 10 times as common as the <i>Pachycondyla</i> nests (LEAL & OLIVEIRA 1995).  |
| Pachycondyla<br>senaarensis<br>(Brachyponera<br>senaarensis) | Seeds                                | Trunk trail | -          | 1   | ?            | ?            | or<br>2      | Recruitment: Forage by a system of underground tunnels (galleries) radiating out into foraging area. They forage solitarily only in a small area around the end of the tunnel. Map shows a structure quite similar to trunk trails (DEJEAN & LACHAUD 1994).  Size: Small, can be retrieved by one ant, which collect seeds solitarily at the end of the trunk trails (DEJEAN & LACHAUD 1994).  Space: ?  Depletability: ?  Frequency: Numerous observations of ants returning with seeds and prey were made (DEJEAN & LACHAUD 1994), therefore probably somewhat common.  |
| Pachycondyla<br>senaarensis<br>(Brachyponera<br>senaarensis) | Small prey                           | Trunk trail | _          | 1   | ?            | ?            | 2            | Recruitment: Forage by a system of underground tunnels (galleries) radiating out into foraging area. They forage solitarily only in a small area around the end of the tunnel. Map shows a structure very similar to trunk trails of other species (DEJEAN & LACHAUD 1994).  Size: Small, can be retrieved by one ant.  Space: ?  Depletability: ?  Frequency: Numerous observations of ants returning with seeds and prey were made suggesting prey is at least somewhat common (DEJEAN & LACHAUD 1994).   |

| Paratrechina<br>longicornis | Honeydew                  | Long-term<br>trail network | Polydomous | ?            | ? | 1 | ? | Recruitment: long-term trail network to honeydew, with pheromone that persists longer than 24hrs (WITTE & al. 2007).  Size: ?  Space: ?  Depletability: Collection of honeydew does not decrease the rate at which it occurs. Honeydew is described as a "permanent" resource (WITTE & al. 2007) or "semi-permanent" resource (CZACZKES & al. 2013).  Frequency: ? Colony size: ?   |
|-----------------------------|---------------------------|----------------------------|------------|--------------|---|---|---|---|
| Paratrechina<br>longicornis | Large prey                | Short term trails          | Polydomous | 2            | 1 | ? | ? | Recruitment: Volatile recruitment system for attracting ants to large prey or large dead insects (WITTE & al. 2007). A different pheromone is used for short-term trails to large prey (CZACZKES & al. 2013).  Size: Medium, multiple workers needed to retrieve prey (CZACZKES & al. 2013).  Space: Large prey are "ephemeral" (CZACZKES & al. 2013) and apparently unpredictable in space.  Depletability: ?  Frequency: ?  |
| Paratrechina<br>longicornis | Large prey                | Volatile re-<br>cruitment  | Polydomous | 2            | 1 | ? | ? | Recruitment: Volatile recruitment system for attracting ants to large prey or large dead insects (WITTE & al. 2007).  Size: Medium, multiple workers needed to retrieve prey.  Space: "Ephemeral", paper implies that prey could be unpredictably dispersed (CZACZKES & al. 2013).  Depletability: ?  Frequency: ?  Colony size: ?  |
| Pheidole fallax             | Large prey<br>and carrion | Short-term<br>trail        | -          | 2-3          | 1 | ? | ? | Recruitment: Short-term trails, rapidly recruit to food sources like a dead lizard (ITZKOWITZ & HALEY 1983).  Size: Medium or large, numerous workers are involved in retrieving large prey and items such as a dead lizard  Space: "Erratic food source" (ITZKOWITZ & HALEY 1983).  Depletability: ?  Frequency: ?   |
| Pheidole militicida         | Seeds                     | Trunk trail                |            | 1            | ? | 2 | 1 | Recruitment: Nice maps of trunk trails (HÖLLDOBLER & MÖG-LICH 1980).  Size: Small, can be retrieved by one ant.  Space: Mesquite grassland habitat, seeds are probably fairly dispersed (Lanan, personal observation).  Depletability: "The persistence of a trunk route depends on the amount of seeds available in the foraging area to which it leads. When an area has been greatly depleted of its suitable seed supplies, the trunk route is abandoned and a new one, leading to a different area, is established". Tested this by supplementing food (HÖLLDOBLER & MÖGLICH 1980).  Frequency: Common, authors observed them retrieving numerous seeds (HÖLLDOBLER & MÖGLICH 1980).   |
| Pheidole oxyops             | Large dead insects        | Short-term<br>trails       | -          | 2<br>or<br>3 | 1 | ? | ? | Recruitment: Short-term trails that have a quick decay rate (CZACZ-KES & RATNIEKS 2012).  Size: Medium or large, large numbers of workers are needed to retrieve resources such as vertebrate carrion or large dead insects (CZACZKES & RATNIEKS 2012).  Space: Individual items are "non-renewable" and thus unlikely to re-occur in the same spot (CZACZKES & RATNIEKS 2012).  Depletability: ?  Frequency: ?   |
| Pheidole punctulata         | Honeydew                  | Long-term<br>trail network | _          | 2            | 3 | 1 | 1 | Recruitment: Polydomous, with ground nests connected to arboreal nests via "runways" that are sometimes covered in soil and are long-term. Also connected to patches of honeydew-secreting insects both in the canopy and on nearby ground plants (WAY 1953).  Size: Aggregations of insects are apparently tended by multiple ants (WAY 1953).  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Patchy, insects are in clusters (WAY 1953).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs Apparently not depletable, because trails go to patches over long periods of time (WAY 1953).  Frequency: Continuously secreted, therefore likely that a forager can find honeydew in the next foraging bout at the same spot, and trail traffic is continuous indicating that honeydew is continuously available (WAY 1953). |

|                           |                                      | ,                            |   | -            |   |   |   |   |
|---------------------------|--------------------------------------|------------------------------|---|--------------|---|---|---|---|
| Pheidole rhea             | Seeds                                | Trunk trail                  | - | 1            | 2 | ? | ? | Recruitment: Enormous, impressive trunk trail systems that fan out to foraging areas where they mainly collect seeds and some dead insects (Lanan, personal observation). Note: This would be an excellent study species and it is surprising that no one has worked on them in the field.  Size: Small, can be retrieved by one ant.  Space: Grass seeds seem to be very patchy in the area around a large colony on Reddington Pass. Ants focused mostly on grass patches and not under junipers (Lanan, personal observation).  Depletability: ?  Frequency: ?   |
| Pheidole titanis          | Groups of<br>small prey:<br>termites | Group raid                   | _ | 2<br>or<br>3 | 1 | ? | 2 | Recruitment: Group raiding with a scout (FEENER 1988).  Size: Medium or large, 200 - 2000 termites are captured by groups of ants in one raid (FEENER 1988).  Space: Unpredictable in space. Termite foraging galleries can pop up anywhere overnight during the monsoon in the Sonoran Desert where I have observed these ants raiding (Lanan, personal observation). Locations of termite foraging galleries are also unpredictable in Mexico, where they come down from tree nests to forage in litter (FEENER 1988).  Depletability: ?  Frequency: Termites are fairly common (FEENER 1988), moderately common (Lanan, personal observation). |
| Pheidologeton<br>diversus | Fruit                                | Raid                         | - | 2            | 1 | 1 | 2 | Recruitment: Use true raids that branch out from the trunk trail and are not led by a scout (MOFFETT 1988b).  Size: Medium, fruits may be large clumps of food collected by numerous ants, but the colony is comparatively very large.  Space: "bonanzas" are unpredictable in space, often falling from the trees above (map also suggests random spatial distribution) (MOFFETT 1988b).  Depletability: Foraging will not affect the rate at which fruit falls from above.  Frequency: ?  |
| Pheidologeton<br>diversus | Large<br>carrion                     | Raid                         | - | 2            | 1 | 1 | ? | Recruitment: Use true raids that branch out from the trunk trail and are not led by a scout (MOFFETT 1988b).  Size: Medium, retrieved by multiple ants, but colony is comparatively large (MOFFETT 1988b).  Space: "Bonanzas" are unpredictable in space, often falling from the trees above (map also suggests random spatial distribution) (MOFFETT 1988b).  Depletability: Collection of carrion is not likely to affect the frequency at which it occurs in the future.  Frequency: ?   |
| Pheidologeton<br>diversus | Large prey                           | Raid                         | - | 2            | 1 | ? | ? | Recruitment: Use true raids that branch out from the trunk trail and are not led by a scout (MOFFETT 1988b).  Size: Medium, multiple workers needed to retrieve prey (MOFFETT 1988b).  Space: "Bonanzas" are unpredictable in space, often falling from the trees above (map also suggests random spatial distribution) (MOFFETT 1988b).  Depletability: ?  Frequency: ?  |
| Pheidologeton<br>diversus | Seeds                                | Raid                         | _ | 1            | 1 | ? | ? | Recruitment: Raids (MOFFETT 1988b). In some cases short-term trails can also be created without raids.  Size: Small, although numerous ants were involved in collecting the patch of seeds, individual seeds could be retrieved by single ants (MOFFETT 1988b).  Space: "Bonanzas" are unpredictable in space, often falling from the trees above (map also suggests random spatial distribution) (MOFFETT 1988b).  Depletability: ?  Frequency: Unknown how frequent seeds are, author supplemented seeds to study behavior.   |
| Pheidologeton<br>diversus | Fruit                                | Trunk trails<br>(with raids) | _ | 2            | 1 | 1 | 2 | Recruitment: Trunk trails often led to areas under fruit trees, which were dense resource patches. However, unlike other trunk trail systems, workers often search the area at the end of the trail with raids (MOFFETT 1988b) This data is used twice, once for trunk trails and once for raids since both strategies are used in combination.  Size: Medium, fruits may be large clumps of food collected by numerous ants, but the colony is comparatively very large.   |

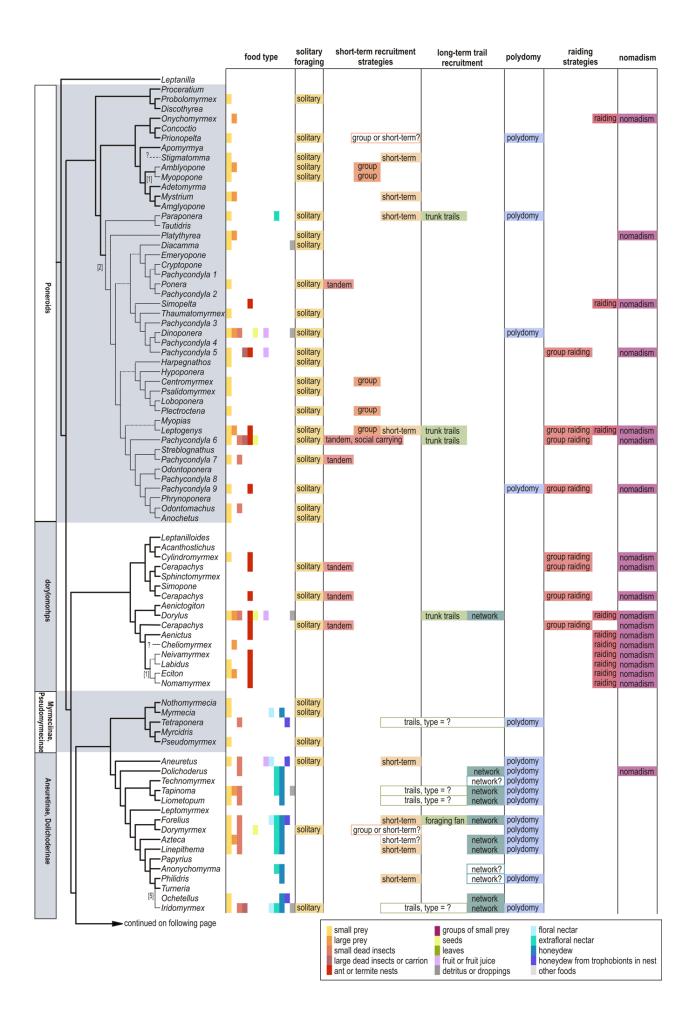
|                              |            |                                    |            |              |   |   |         | Space: "Bonanzas" are unpredictable in space, often falling from the trees above (map also suggests random spatial distribution) (MOFFETT 1988b).  Depletability: Foraging will not affect the rate at which fruit falls from above.  Frequency: At least fairly common, collection of fruit was observed multiple times.  |
|------------------------------|------------|------------------------------------|------------|--------------|---|---|---------|--|
| Platythyrea conradti         | Small prey | Solitary                           | -          | 1            | 1 | 1 | ?       | Recruitment: Arboreal solitary hunters, interestingly they carry large droplets of liquid under their heads. They do apparently use scent trails to recruit to liquid foods, but no detail on this. They also capture termites, but no info on the distribution of termites in space (DEJEAN 2011).  Size: Small, can be retrieved by one ant.  Space: Capture sleeping insects on branches and under leaves, which seem to be fairly dispersed on the trees where the ants hunt (DEJEAN 2011).  Depletability: Unlikely to be depleted, these are mainly flying insects that land on the tree to sleep (DEJEAN 2011).  Frequency: ? |
| Pogonomyrmex<br>barbatus     | Seeds      | Trunk trail                        | -          | 1            | 1 | 2 | 1       | Recruitment: Trunk trails (GORDON 1993).  Size: Small, can be retrieved by one ant.  Space: Ants collect seeds produced in previous seasons that are then dispersed by wind and flooding and turned out of the seed bank, thus the seeds collected are not related to the current plant crop. Seeds are patchy only at a scale greater than a single foraging range (GORDON 1993).  Depletability: The ants can deplete certain types of seeds and some areas, particularly closer to the nest and along the trails (GORDON 1993).  Frequency: Ants are observed to collect large numbers of seeds (GORDON 1993).                    |
| Pogonomyrmex<br>naegelii     | Seeds      | Solitary                           | _          | 1            | ? | ? | or<br>2 | Recruitment: Solitary (BELCHIOR & al. 2012).  Size: Small, can be retrieved by one ant.  Space: ?  Depletability: ?  Frequency: Fairly common, they observed a number of workers retrieving seeds in different seasons (BELCHIOR & al. 2012).  |
| Pogonomyrmex<br>occidentalis | Seeds      | Trunk trail                        | _          | 1            | 2 | 2 | ?       | Recruitment: Permanent trunk trails (MULL & MACMAHON 1997).  Size: Small, can be retrieved by one ant.  Space: Sagebrush steppe in Wyoming, ants seem to prefer to forage in open spaces rather than under the shrubs. Grass also grows in these open patches, so it is likely seeds are somewhat patchy (MULL & MACMAHON 1997).  Depletability: Seeds were depleted most near the trails (MULL & MACMAHON 1997).  Frequency: ?  |
| Polyrhachis<br>bellicosa     | EFN        | (?) Long-<br>term trail<br>network | Polydomous | ?            | 3 | 1 | ?       | Recruitment: "Trunk trails" link nests, unclear whether trunk or trail network. (LIEFKE & al. 1998). This data included only in the polydomy data set.  Size: ?  Space: Very predictably secreted by individual nectaries in the same location, over a time scale of weeks (LIEFKE & al. 2001).  Depletability: Foraging is unlikely to cause a decrease in nectar secretion by nectaries.  Frequency: ?  Colony size: ?   |
| Polyrhachis<br>laboriosa     | EFN        | Solitary                           | -          | 1            | 3 | 1 | ?       | Recruitment: Workers finding a very small amount of sugary liquid do not recruit (MERCIER & LENOIR 1999).  Size: A nectary is a "small sized reward" exploitable by only one ant (MERCIER & LENOIR 1999). Multiple ants apparently are not necessary to defend the resource.  Space: "Fairly permanent" (MERCIER & LENOIR 1999).  Depletability: Foraging is unlikely to cause a decrease in nectar secretion by nectaries.  Frequency:?   |
| Polyrhachis vicina           | Honeydew   | (?) Trails, type?                  | Polydomous | 2<br>or<br>3 | ? | 1 | 1       | Recruitment: Run to honeydew patches along "trails radiating outward from the nest". Also take pine tree secretions, small prey (WANG & TANG 1994). Most likely either trunk trails or long-term trail network, but not enough information. Data used for the polydomy analysis only.  Size: Medium or large, numerous workers visited larger clusters of aphids (WANG & TANG 1994).   |

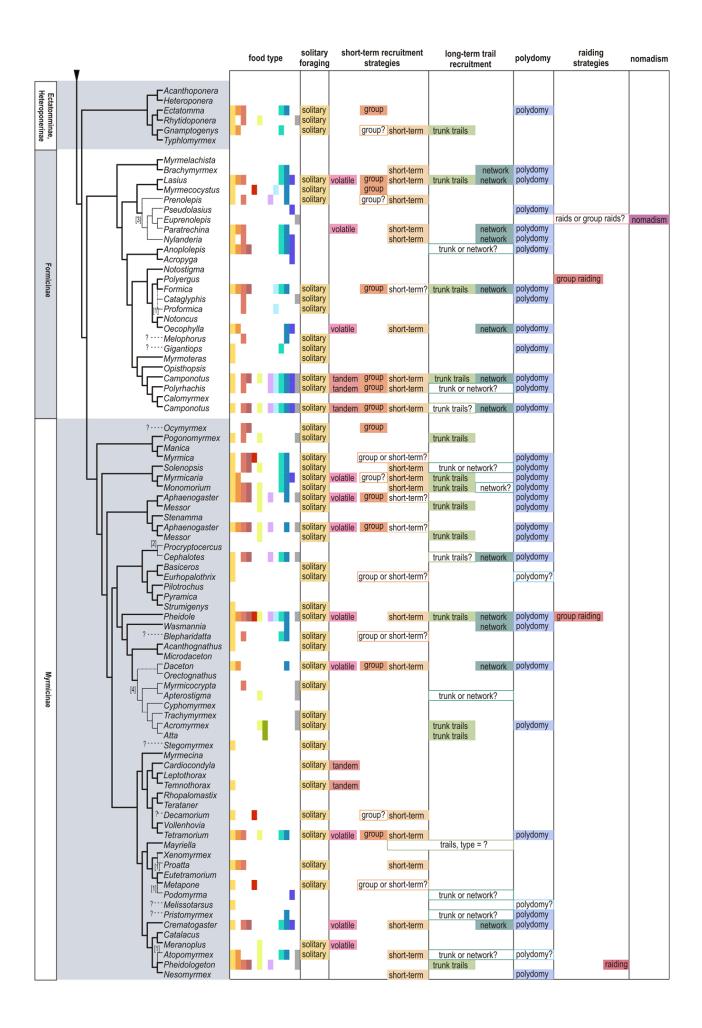
|  |   |                            |            |   |     |   |   | Space: Habitat with shrubs and trees, at the base of which ants nest. Location of food sources varied between months, honeydew was most available in the summer (WANG & TANG 1994).  Depletability: Collection of honeydew does not decrease the rate at which it occurs.  Frequency: Honeydew is the main food source of the ants and is frequently collected (WANG & TANG 1994).   |
|--|---|----------------------------|------------|---|-----|---|---|--|
| Prenolepis imparis                       | Carrion and<br>dead insects<br>(e.g., large<br>dead worm) | Short term<br>trail        | _          | 2 | ?   | 1 | ? | Recruitment: Short-term trails (TALBOT 1943).  Size: Medium, multiple workers are needed to retrieve the large dead earthworm (TALBOT 1943).  Space: ?  Depletability: Unlikely to be depleted, harvesting one dead earthworm is unlikely to affect the occurrence of the next dead earthworm in the area.  Frequency: ?   |
| Prenolepis imparis                       | Fruit   | Short-term<br>trail        | _          | 3 | 1   | 1 | 2 | Recruitment: Short-term trails, reference contains wonderful map. Trails lasted from one to 13 days, average seems to be about three days (TALBOT 1943).  Size: Fallen pears are large, relative to colony size.  Space: Studied in author's backyard, where ant nests are underneath a pear tree (TALBOT 1943). Pears are likely to fall randomly relative to the small foraging ranges of the colonies.  Depletability: Foraging will not affect the rate at which fruit falls from above.  Frequency: Fairly common, drop from tree (TALBOT 1943).  |
| Proatta butteli                          | Large prey  | Short-term<br>trail        | _          | 2 | ?   | 1 | ? | Recruitment: Can retrieve small items solitarily, but recruit to larger items. Probably short-term trails rather than group recruitment because trails could be induced with gland extracts (MOFFETT 1986a).  Size: Medium, multiple workers needed to retrieve prey (MOFFETT 1986a).  Space: ?  Depletability: Probably rely on "influx" of prey from elsewhere (MOFFETT 1986a).  Frequency: ?  |
| Proatta butteli                          | Small prey  | Solitary                   | -          | 1 | ?   | 1 | ? | Recruitment: Can retrieve small items solitarily (MOFFETT 1986a). Size: Small, can be retrieved by one ant. Space: ? Depletability: Unlikely to be depleted, probably rely on "influx" of prey from elsewhere (MOFFETT 1986a). Frequency: ?  |
| Simopelta oculata                        | Ant nest  | Raid                       | Nomadic    | 2 | ?   | ? | 2 | Recruitment: Raids (GOTWALD & BROWN 1966), nomadic (KRON-AUER & al. 2011).  Size: Medium, part of the raid attacked a smaller <i>Pheidole</i> nest in a log while the rest of the raid continued through the leaf litter (Lanan, personal observation of a raid over two days in Costa Rica).  Space: P Depletability: P Frequency: Apparently prefer <i>Pheidole</i> nests (KRONAUER & al. 2011). <i>Pheidole</i> nests were quite common in twigs and logs at the site where I observed a raid (Lanan, personal observation). It is therefore likely that nests are fairly common and future raids will find more before the colony moves. |
| Stegomyrmex vizottoi                     | Small prey:<br>millipede<br>eggs                          | Solitary                   | -          | 1 | 1   | ? | ? | Recruitment: Solitary (DINIZ & BRANDÃO 1993).  Size: Small, can be retrieved by one ant.  Space: Millipede eggs are apparently dispersed throughout the litter and workers carefully search every crevice (DINIZ & BRANDÃO 1993).  Depletability: ?  Frequency: ?  |
| Strumigenys lujae<br>(serrastruma lujae) | Small prey:<br>collembola                                 | Solitary                   | _          | 1 | 2-3 | ? | ? | Recruitment: Solitary (DEJEAN & BENHAMOU 1993). Size: Small, can be retrieved by one ant. Space: Prey aggregate in humid patches in the litter (DEJEAN & BENHAMOU 1993). Depletability: ? Frequency: ?   |
| Tapinoma sessile                         | Honeydew  | Long-term<br>trail network | Polydomous | ? | 3   | 1 | ? | Recruitment: Polydomous with a trail network, trail geometry is shaped by man-made structures in the habitat (BUCZKOWSKI & BENNETT 2008b).  Size: ?  Space: Ants visit the same location repeatedly to collect honeydew from the same insects. Honeydew-secreting insects colonized woody  |

|                           |                           |                            |            |   |   |   |   | shrub patches, and were apparently present on these same shrubs over the course of the season(BUCZKOWSKI & BENNETT 2008b).  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: ?   |
|---------------------------|---------------------------|----------------------------|------------|---|---|---|---|--|
| Thaumatomyrmex contumax   | Small prey:<br>millipedes | Solitary                   | _          | 1 | ? | 1 | 1 | Recruitment: Solitary (BRANDÃO & al. 1991). Size: Small, can be retrieved by one ant. Space: ? Depletability: Highly unlikely that prey is depleted, due to tiny colony size. Frequency: Prey millipedes are "extremely abundant in Neotropical litter" (BRANDÃO & al. 1991).  |
| Wasmannia<br>auropunctata | Honeydew                  | Long-term<br>trail network | Polydomous | ? | 3 | 1 | 1 | Recruitment: Polydomy and long-term trail network (SPENCER 1941), "efficient at recruiting by pheromone trails to important food sources such as coccid colonies or large insect prey" (FABRES & BROWN 1978).  Size: ?  Space: Ants visit the same location repeatedly to collect honeydew from the same insects, very predictable in space.  Depletability: Collection of honeydew is unlikely to decrease the rate at which it occurs.  Frequency: Honeydew is continuously secreted and "abundant" (SPENCER 1941), therefore likely that a forager can find honeydew in the next foraging bout. |

**Figure S1:** The distribution of food types and foraging strategies across the phylogeny of the ants. The phylogeny is drawn to reflect the current understanding of the ant phylogenetic tree based on recently published molecular studies. Branches of the tree drawn in solid lines are based on (BRADY & al. 2006), while portions in thin, dotted lines are drawn from [1] MOREAU & al. (2006), [2] SCHMIDT (2013), [3] LAPOLLA & al. (2010), [4] MEHDIABADI & SCHULTZ (2010), and [5] WARD & al. (2010). Taxa of uncertain placement are marked with a question mark. Species of the highly paraphyletic genus *Pachycondyla* are divided among eight groups based on SCHMIDT (2013). For those apparently paraphyletic genera (WARD & al. 2010) that occur twice in the phylogeny of BRADY & al. (2006) (i.e., *Camponotus, Aphaenogaster*, and *Messor*) the same data are plotted twice, and three times for the highly paraphyletic *Cerapachys*. References for the diet and foraging data are provided in Table S1.

(next pages)





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