R Pillay et al. - Supporting Information

WebTable 1. Criteria for inclusion of a species in each of six terrestrial biomes

(1) Definition of Tropical Forest Species

Geographic range overlap with the tropical forest biome, which consists of (1) Tropical and Subtropical Moist Broadleaf Forests, (2) Tropical and Subtropical Dry Broadleaf Forests, (3) Tropical and Subtropical Coniferous Forests, and (4) Mangroves (Dinerstein *et al.* 2017). Reported to be associated with at least one of the following tropical forest habitat types below. It can also occur in any other habitat type listed in the International Union for Conservation of Nature (IUCN) 2012 Habitat Classification Scheme (IUCN 2020).

Definition of Tropical Forest Endemic Species

A species has to have (1) 100% and 80–100% geographic range overlap with the tropical forest biome. Reported to be associated exclusively in at least one of the following tropical forest habitat types below. In addition to these tropical forest habitats, it can only occur in wetland (code 5), rocky area (code 6), and cave (code 7) habitat types listed in the IUCN 2012 Habitat Classification Scheme (IUCN 2012).

Habitat	IUCN code
Forest – Subtropical/Tropical Dry	1.5
Forest – Subtropical/Tropical Moist Lowland	1.6
Forest – Subtropical/Tropical Mangrove Vegetation above High Tide Level	1.7
Forest – Subtropical/Tropical Swamp	1.8
Forest – Subtropical/Tropical Moist Montane	1.9
Artificial/Terrestrial – Forest – Subtropical/Tropical Heavily Degraded Former Forest	14.6

(2) Definition of Tropical Grassland Species

Geographic range overlap with the tropical grassland biome, which consists of (1) Tropical and Subtropical Grasslands, Savannahs and Shrublands, (2) Flooded Grasslands and Savannahs, and (3) Montane Grasslands and Savannahs within tropical mesic ecoregions (Dinerstein *et al.* 2017). Reported to be associated with at least one of the following tropical grassland habitat types below. It can also occur in any other habitat type listed in the IUCN 2012 Habitat Classification Scheme (IUCN 2012).

Habitat	IUCN code
Savanna – Dry	2.1
Savanna – Moist	2.2
Shrubland – Subtropical/Tropical Dry	3.5
Shrubland – Subtropical/Tropical Moist	3.6
Shrubland – Subtropical/Tropical High Altitude	3.7
Grassland – Subtropical/Tropical Dry	4.5
Grassland – Subtropical/Tropical Seasonally Wet/Flooded	4.6
Grassland – Subtropical/Tropical High Altitude	4.7
Wetlands (inland) – Permanent Rivers/Streams/Creeks (includes waterfalls)	5.1
Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	5.2
Wetlands (inland) – Shrub Dominated Wetlands	5.3
Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands	5.4
Wetlands (inland) – Permanent Freshwater Lakes (> 8 ha)	5.5
Wetlands (inland) – Seasonal/Intermittent Freshwater Lakes (> 8 ha)	5.6
Wetlands (inland) – Permanent Freshwater Marshes/Pools (< 8 ha)	5.7
Wetlands (inland) – Seasonal/Intermittent Freshwater Marshes/Pools (< 8 ha)	5.8
Wetlands (inland) - Freshwater Springs and Oases	5.9
Wetlands (inland) – Geothermal Wetlands	5.12
Wetlands (inland) – Permanent Inland Deltas	5.13
Wetlands (inland) - Permanent Saline, Brackish, or Alkaline Lakes	5.14
Wetlands (inland) - Seasonal/Intermittent Saline, Brackish, or Alkaline Lakes and Flats	5.15
Wetlands (inland) - Permanent Saline, Brackish, or Alkaline Marshes/Pools	5.16

Wetlands (inland) - Seasonal/Intermittent Saline, Brackish, or Alkaline Marshes/Pools	5.17
Marine Coastal/Supratidal – Coastal Freshwater Lakes	13.5

(3) Definition of Desert and Xeric Shrubland Species

Geographic range overlap with the Desert and Xeric Shrublands biome (Dinerstein *et al.* 2017). Reported to be associated with at least one of the following desert and xeric shrub habitat types below. It can also occur in any other habitat type listed in the IUCN 2012 Habitat Classification Scheme (IUCN 2012).

Habitat	IUCN code
Savanna – Dry	2.1
Shrubland – Temperate	3.4
Shrubland – Subtropical/Tropical Dry	3.5
Grassland – Subtropical/Tropical Dry	4.5
Desert – Hot	8.1
Desert – Temperate	8.2
Desert – Cold	8.3

(4) Definition of Temperate Grassland Species

Geographic range overlap with the temperate grassland biome, which consists of (1) Temperate Grasslands, Savannahs, and Shrublands, (2) Flooded Grasslands and Savannahs, (3) Montane Grasslands and Savannahs, and (4) Tundra (Dinerstein *et al.* 2017). Reported to be associated with at least one of the following temperate grassland habitat types below. It can also occur in any other habitat type listed in the IUCN 2012 Habitat Classification Scheme (IUCN 2012).

Habitat	IUCN code
Shrubland – Subarctic	3.1
Shrubland – Subantarctic	3.2
Shrubland – Boreal	3.3
Shrubland – Temperate	3.4
Grassland – Tundra	4.1
Grassland – Subarctic	4.2
Grassland – Subantarctic	4.3
Grassland – Temperate	4.4
Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	5.1
Wetlands (inland) – Tundra Wetlands (includes pools and temporary waters from snowmelt)	5.1
Wetlands (inland) - Alpine Wetlands (includes temporary waters from snowmelt)	5.11
Wetlands (inland) – Geothermal Wetlands	5.12
Wetlands (inland) – Permanent Inland Deltas	5.13
Wetlands (inland) - Permanent Saline, Brackish, or Alkaline Lakes	5.14
Wetlands (inland) - Seasonal/Intermittent Saline, Brackish, or Alkaline Lakes and Flats	5.15
Wetlands (inland) - Permanent Saline, Brackish, or Alkaline Marshes/Pools	5.16
Wetlands (inland) - Seasonal/Intermittent Saline, Brackish, or Alkaline Marshes/Pools	5.17
Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	5.2
Wetlands (inland) – Shrub Dominated Wetlands	5.3
Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands	5.4
Wetlands (inland) – Permanent Freshwater Lakes (> 8 ha)	5.5
Wetlands (inland) – Seasonal/Intermittent Freshwater Lakes (> 8 ha)	5.6
Wetlands (inland) – Permanent Freshwater Marshes/Pools (< 8 ha)	5.7
Wetlands (inland) – Seasonal/Intermittent Freshwater Marshes/Pools (< 8 ha)	5.8
Wetlands (inland) - Freshwater Springs and Oases	5.9
Marine Coastal/Supratidal – Coastal Freshwater Lakes	13.5

(5) Definition of Temperate Forest Species

Geographic range overlap with the temperate forest biome, which consists of (1) Temperate Broadleaf and Mixed Forests, (2) Temperate Conifer Forests, and (3) Boreal Forests or Taiga (Dinerstein *et al.* 2017). Reported to be associated with at least one of the following temperate forest habitat types below. It can also occur in any other habitat type listed in the IUCN 2012 Habitat Classification Scheme (IUCN 2012).

Habitat	IUCN code
Forest – Boreal	1.1
Forest – Subarctic	1.2
Forest – Subantarctic	1.3
Forest – Temperate	1.4

(6) Definition of Mediterranean Forest, Woodland, and Scrub Species

Geographic range overlap with the Mediterranean Forest, Woodland, and Scrub biome (Dinerstein *et al.* 2017). Reported to be associated with at least one of the following Mediterranean forest, woodland, and scrub habitat types below. It can also occur in any other habitat type listed in the IUCN 2012 Habitat Classification Scheme (IUCN 2012).

Habitat	IUCN code
Shrubland – Mediterranean-type Shrubby Vegetation	3.8
Forest – Temperate	1.4

Notes: for all biomes we followed the boundaries defined by Dinerstein et al. (2017).

WebReferences

- Dinerstein E, Olson D, Joshi A, *et al.* 2017. An ecoregion-based approach to protecting half the terrestrial realm. *BioScience* 67: 534–45.
- IUCN (International Union for Conservation of Nature). 2012. IUCN Habitats Classification Scheme (v3.1). Gland, Switzerland: IUCN.
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