# **Household interview**

1.	Address:				
2.	How many people were living in this house over the past 2 days?				
3.	Were any animals staying here over the past 2 days?				
4.	(if yes) What type of animal? How many?				
5.	We are counting total human hours outside the house in the yard. How much time have people spent outside in your yard today, added all together? (If prompting is needed, say "For example, if 2 people spent one hour outside so far today, that would be 2 hours")				
6.	How much time did people spend outside in your yard yesterday?				
7.	How much time did people spend outside in your yard 2 days ago?				
8.	How much time did your pet(s) spend outside in your yard today? 2 days ago?				
9.	Did people wear mosquito repellent when they went outside over the past 2 days? (If yes, prompt "Always, usually or sometimes?"  Always Usually Sometimes Rarely Never				
10.	Did you do anything else to avoid mosquito bites, such as use insecticides during the last week?				
Were windows open? Y / N Did they have screens? Y / N					

Were doors open? Y / N Did they have screen doors? Y / N

#### Supplemental Material S2. New York Aedes albopictus colony details

Eggs were collected in the field in 2019 for another study by Talya Shragai (Shragai 2020). Mosquitoes were reared in separate colonies by location for a few generations and then combined into one NY colony.

The mosquitoes utilized in the life table had been in laboratory colony (sum of generations passed in location-specific and general NY colonies) for between 6 (replicate 1) and 10 (replicate 4) generations.

Eggs were collected from the following sites:

County	Site Name
Westchester	Yonkers
Rockland	Spring Valley
Suffolk	Babylon
Suffolk	Central Islip
Suffolk	Smithtown

The Babylon and Central Islip sites were the same as those sampled in our study. Smithtown is also on Long Island and Yonkers and Spring Valley are in the Hudson Valley, within 15 km of Long Island. The Spring Valley site is approximately 78 km from the furthest East site in our study. The distance between the furthest west and furthest east blood meal collection sites in our study is 40 km. Therefore, this colony encompasses mosquitoes from a larger geographic area in NY compared to the blood meal analysis collection sites.

### **Supplemental Table S1**

Mean ( $\pm$  SE) number of blood meals, residents, and time spent outside for humans, cats and dogs per residential property sampled

Mean (± SE) per property			
Blood meal/ property	Residents/ property	Time spent outside (min)/ property <sup>†</sup>	
0.96 (0.21)	3.18 (0.36)	234.26 (49.83)	
0.75 (0.17)	0.39 (0.19)	278.74 (232.93)	
0.18 (0.09)	0.29 (0.10)	53.61 (22.05)	
	0.96 (0.21) 0.75 (0.17)	Blood meal/ property Residents/ property  0.96 (0.21) 3.18 (0.36)  0.75 (0.17) 0.39 (0.19)	

<sup>\*</sup> N = total number of blood meals identified to host type from residential sites

# **Supplemental Table S2**

Abundance and time-weighted host feeding indices for blood fed *Ae. albopictus* collected on residential properties

Index	Human vs Cat	Human vs Dog	Cat vs Dog
HFI*	0.16	0.49	3.05
${\rm HFI_T}^\dagger$	0.20	0.14	0.73

<sup>\*</sup>Calculated with mean number of blood meals and residents per residential property sampled

 $<sup>^{\</sup>dagger}$  Mean ( $\pm$  SE) of within household sum of time spent outside by all residents of a given host type according to self-reported household interview data

<sup>†</sup> Calculated with mean number of blood meals, residents and mean time spent outside per residential property sampled

### **Supplemental Figure legends:**

## Figure S1. Site map

Google Earth satellite image of Long Island (as displayed in June 2021). Yellow triangles represent residential sites and orange squares represent farm sites.

### Figure S2. Distribution of blood meals by site type

Distribution of *Ae. albopictus* blood meal source by sampling site: residential (n=4) and farm (n=4).

**Figure S3.** Box plot of average time spent outside (min) by each animal type per residential property (n=28).





