



## Know your Mosquitoes: Comparing GLOBE Observer Mosquito Habitat Mapper Taxa

	<i>Anopheles</i>	<i>Culex</i>	<i>Aedes aegypti</i>	<i>Aedes albopictus</i>	Other
<b>Common name</b>			Yellow fever mosquito	Asian tiger mosquito	“nuisance species”- if not vectors of disease
<b>Distribution</b>	<i>Anopheles</i> mosquitoes can be found anywhere in the world with the exception of Antarctica	<i>Culex</i> mosquitoes are distributed worldwide in tropical and temperate regions, with the exception of extreme northern latitudes.	distributed in tropical and subtropical areas worldwide <sup>1</sup> .	distributed in tropical and subtropical areas worldwide.	Mosquitoes are found on every continent except Antarctica
<b>Eggs</b>	Laid singly, on water- each egg has floats	Multiple eggs laid as rafts on water	Laid singly, on side of container above waterline	Laid singly, on side of container above waterline	Various: on water, on soil, on plants, depending on species
<b>Larval habitat</b>	The larvae occur in a wide range of habitats, but most species prefer clean, unpolluted water. Have been found in fresh- or salt-water marshes, rice fields, mangrove swamps, grassy ditches, the edges of streams and rivers, and temporary rain pools. <sup>2</sup>	utilizes an exceptionally wide range of larval habitats. The water used by this species can vary from nearly clear to grossly polluted <sup>3</sup> . Various bodies of standing fresh water: puddles, pools, ditches, tin cans, buckets, bottles, and water storage tanks.	Prefers manufactured containers over natural container habitats. Range of water conditions.	Commonly found in both natural and artificial container habitats, less preference reported for manufactured containers over natural containers. Range of water conditions.	Depends on species
<b>Larva resting position</b>	Horizontal, beneath the water’s surface.	Hangs at angle from siphon from the water surface	Hangs at angle from siphon just under the water surface	Hangs at angle from siphon just under the water surface	Most species hang at angle from siphon just under the water surface <sup>4</sup>
<b>Larva breathing apparatus</b>	Breathe through posterior spiracles	Breathe through siphon	Breathe through siphon	Breathe through siphon	Breathe through siphon

<sup>1</sup> the United States, *Aedes aegypti* is found in the more southern states, while *Aedes albopictus* can survive colder temperatures and has a wider geographic range.)

<sup>2</sup> <https://www.cdc.gov/malaria/about/biology/mosquitoes/index.html>

<sup>3</sup> [vectorbio.rutgers.edu/outreach/species/rest.htm](http://vectorbio.rutgers.edu/outreach/species/rest.htm)

<sup>4</sup> but some, like species of genera *Mansonia* and *Coquillettidia* have a sharp pointed siphon to pierce aquatic plant tissue and breathe through the plant roots and stems

<b>Adult biting behavior and habitat</b>	They are active between sunrise and sunset and can be found both indoors and outdoors. <sup>5</sup>	They feed at night on humans and animals and are found indoors and outdoors.	Unlike most other mosquitoes, <i>Aedes</i> mosquitoes are active and bite only during the daytime, with peak activity during the early morning and in the evening before dusk <sup>6</sup>	Unlike most other mosquitoes, <i>Aedes</i> mosquitoes are active and bite only during the daytime, with peak activity during the early morning and in the evening before dusk.	Depends on species
<b>Preferred host</b>	Some species have a preference for human blood like the <i>Anopheles gambiae</i> , which can carry and spread Malaria. <i>Anopheles arabiensis</i> feeds on both animals and humans. Other species prefer bird blood, but most of them will accept any blood they can find.	Varies by species	found in urban areas, is active both indoors and outdoors, and has a preference for humans as the source of its blood meal.	mostly associated with areas of vegetation and is found primarily outdoors; the female will bite domestic and wild animals, as well as humans.	Many of the approx. 3,500 mosquito species prefer cows — or pigs, dogs, or other animals.
<b>Disease vector for pathogens that cause:</b>	malaria. Only estimated 40+species of 400+ Anopheles species can serve as a vector for malaria.	Lymphatic filariasis Eastern Equine encephalitis, Japanese encephalitis Rift Valley fever, Sindbis fever, avian malaria	yellow fever, West Nile Virus, dengue, Zika chikungunya, other viruses	yellow fever, West Nile Virus, dengue, Zika chikungunya, other viruses	Rift Valley Fever ( <i>Aedes vexans</i> and other <i>Aedes</i> species)
<b>Protection</b>	Bed nets, surveillance, habitat mitigation, education	surveillance, habitat mitigation, education	surveillance, habitat mitigation, education	surveillance, habitat mitigation, education	surveillance, habitat mitigation, education
<b>Notes for your region</b>					

<sup>5</sup> Most *Anopheles* mosquitoes are crepuscular (active at dusk or dawn) or nocturnal (active at night). Some *Anopheles* mosquitoes feed indoors (endophagic) while others feed outdoors (exophagic). After blood feeding, some *Anopheles* mosquitoes prefer to rest indoors (endophilic) while others prefer to rest outdoors (exophilic). Biting by nocturnal, endophagic *Anopheles* mosquitoes can be markedly reduced through the use of insecticide-treated bed nets (ITNs) or through improved housing construction to prevent mosquito entry (e.g., window screens). Endophilic mosquitoes are readily controlled by indoor spraying of residual insecticides. In contrast, exophagic/exophilic vectors are best controlled through source reduction (destruction of the breeding sites). Source: <https://www.cdc.gov/malaria/about/biology/mosquitoes/index.html>

<sup>6</sup> <https://www.bcm.edu/departments/molecular-virology-and-microbiology/emerging-infections-and-biodefense/mosquitoes>

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