

Mosquitoes

Note: The Mosquito Larvae protocol (mosquitoes:*) was retired in 2018. Mosquito Habitat Mapper (mosquito habitat mapper:*) replaced it as the sole mosquito protocol.

Variable	Units/Format	Definition
mosquitoes:season	n/a	The season in which the mosquito observation is made Options: [fall, winter, spring, summer, dry, wet]
mosquitoes:comments	n/a	Comments on the mosquito observations
mosquitoes:water body depth at 50cm	n/a	Size of the water body being sampled greater than (“gt”) 50 cm Options: [TRUE (t), FALSE (f)]
mosquitoes:water body size m	meters (m)	The approximate size of the water body being sampled (<1 m, 1-10 m, 10 m)
mosquitoes:shaded area percent	percent (%)	Percent of the water body being sampled that is in the shade
mosquitoes:plants	n/a	Plant presence in the water body being sampled Options: [TRUE (t), FALSE (f)]
mosquitoes:algae	n/a	Algal presence in the water body being sampled Options: [TRUE (t), FALSE (f)]
mosquitoes:odor	n/a	Presence of odor from sampled water body Options: [sewage, normal, none]
mosquitoes:surface oil	n/a	Oil presence on the water’s surface Options: [none, flecks]
mosquitoes:turbidity subjective	n/a	A subjective assessment by the individual making the observation if the water in which the mosquitoes were found is turbid or clear
mosquitoes:container types	n/a	The type of container in which the mosquito sample is found Options: [plastic bottle, cement tank] Note: multiple containers can be recorded at a single site.
mosquitoes:most freq habitat type	n/a	Most frequently observed type of mosquito habitat Options: [natural, artificial]
mosquitoes:net pole size cm	centimeters (cm)	Length of the pole on the net used (if used at all) to collect mosquitoes
mosquitoes:net diameter cm	centimeters (cm)	Diameter of the net used (if used at all) to collect mosquitoes
mosquitoes:container water level percent median	percent (%)	Median percent water level in the containers sampled (e.g., 50%)
mosquitoes:lid types	n/a	The type of lid associated with each container in which mosquito samples were found Options: [plastic, wood, clay, metal, none]

Mosquitoes, continued

Variable	Units/Format	Definition
mosquitoes:most freq container color	n/a	A flag indicating if most of the sampled containers have a light or dark color
mosquitoes:most freq cleaning frequency	n/a	Most common cleaning frequency of the containers or water bodies sampled (e.g., 1-2 times/week, >2 times/week)
mosquitoes:number of collection samples	n/a	Number (integer) of samples collected Note: The protocol asked for at least three samples taken at least two minutes apart.
mosquitoes:larvae genus	n/a	Genus of the mosquitoes sampled Options: [Aedes, Culex, Anopheles, other]
mosquitoes:larvae species	n/a	Species of the mosquitoes sampled (e.g., aegypti, albopictus)
mosquitoes:larvae count	n/a	Number (integer) of mosquito larvae present
mosquitoes:larvae count ratio	n/a	This is the ratio of the number of larvae reported / the number of collection samples

Mosquito Habitat Mapper

Variable	Units/Format	Definition
mosquito habitat mapper: measurement latitude	decimal degrees north	Latitude recorded by the GPS of a participant using the GLOBE Observer app at the time of measurement. Range: [-90,90] <i>Note: See also "latitude".</i>
mosquito habitat mapper: measurement longitude	decimal degrees east	Longitude recorded by the GPS of a participant using the GLOBE Observer app at the time of measurement. <i>Note: See also "longitude".</i>
mosquito habitat mapper: measurement elevations	meters (m) above sea level	Elevation at the latitude/longitude location recorded by the GPS of a participant using the GLOBE Observer app at the time of measurement. <i>Note: See also "elevation".</i>
mosquito habitat mapper: data source	n/a	Indicates if the data was entered via the GLOBE Observer App (currently, that is the only option)
mosquito habitat mapper: water source type	n/a	High-level classification of the mosquito habitat type Options: [container: artificial, container: natural, flowing: still water found next to river or stream, still: lake/pond/swamp]
mosquito habitat mapper: water source	n/a	Further classification of the mosquito habitat type Options: [can, bottle, pond, cistern]
mosquito habitat mapper: larvae count	n/a	Number (integer) of mosquito larvae present
mosquito habitat mapper: mosquito eggs	n/a	Are mosquito eggs present? Options: [TRUE, FALSE]
mosquito habitat mapper: mosquito egg count	n/a	<i>This field is currently not used.</i>
mosquito habitat mapper: mosquito pupae	n/a	Are mosquito pupae present? Options: [TRUE (t), FALSE (f)]
mosquito habitat mapper: mosquito adults	n/a	Are adult mosquitoes present? Options: [TRUE (t), FALSE (f)]
mosquito habitat mapper: last identify stage	n/a	Flag indicating the last identification stage a user completed in the Mosquito Habitat Mapper tool in the GLOBE Observer mobile app
mosquito habitat mapper: genus	n/a	Genus of the mosquitoes Options: [Aedes, Anopheles, Culex] <i>Note: This is unvalidated data submitted by citizen scientists and should be validated by scientists through examination of associated voucher photographs.</i>
mosquito habitat mapper: species	n/a	Species of the mosquitoes (e.g., aegypti, albopictus) <i>Note: This is unvalidated data submitted by citizen scientists and should be validated by scientists through examination of associated voucher photographs.</i>

Mosquito Habitat Mapper, continued

Variable	Units/Format	Definition
mosquito habitat mapper: breeding ground eliminated	n/a	Was the breeding ground eliminated? Options: [TRUE (t), FALSE (f)]
mosquito habitat mapper: extra data	n/a	Optional entry if user wants to report the presence of a mosquito species that is not part of the prompts in the GLOBE Observer mobile app
mosquito habitat mapper: water source photo urls	n/a	URL of the mosquito water source photo
mosquito habitat mapper: larva full body photo urls	n/a	URL of the mosquito full body photo
mosquito habitat mapper: abdomen closeup photo urls	n/a	URL for the mosquito abdomen photo
mosquito habitat mapper: comments	n/a	Comments about the mosquito observation
mosquito habitat mapper: location method	n/a	Indicates if the measurement location was determined automatically by device GPS or entered manually
mosquito habitat mapper: location accuracy (m)	meters (m)	For locations determined by device GPS, this is the estimate of accuracy within "n" meters

Nitrates

Variable	Units/Format	Definition
nitrates:nitrate and nitrite mgl	milligrams per liter (mg L ⁻¹)	Concentration of both nitrates and nitrites of a water body in milligrams per liter
nitrates:nitrite only mgl	milligrams per liter (mg L ⁻¹)	Concentration of nitrites of a water body
nitrates:comments	n/a	Comments on water body nitrate measurement
nitrates:water body state	n/a	The state of the water body Options: [normal, frozen, flooded, dry, or unreachable]
nitrates:nitrate kit mfg	n/a	Manufacturer of the nitrate measurement kit
nitrates:nitrate kit model	n/a	Model name of the nitrate measurement kit