Dragonfly Pond Watch Data Sheet

MIGRATORY DRAGONFLY PARTNERSHIP
Working to Understand and Conserve North American Dragonfly Migration

The Migratory Dragonfly Partnership | www.MigratoryDragonflyPartnership.org

Observer	Site Name	Please record data on the 5 migratory dragonfly target species.
E-mail Address	County	**PHOTOS:** Photos are encouraged when possible for records of adults; photos are required for exuviae observations.
State/Province		
Latitude (dd.ddddd)	Longitude (-ddd.ddddd)	

HabitatObs

Habitat Type: ❑ Natural wetland/pond ❑ Restored wetland/pond ❑ Created wetland/pond ❑ Other

Habitat Comments:

Observations

Check abundance of each species seen and check all attributes that apply to members of the species that occur on the date observed.

Species code: Common Green Darner (*Anax junius*) [**Aj**]; Black Saddlebags (*Tramea lacerata*) [**Tl**]; Variegated Meadowhawk (*Sympetrum corrumptum*) [**Sc**]; Spot-winged Glider (*Pantala hymenaea*) [**Ph**]; Wandering Glider (*Pantala flavescens*) [**Pf**]

Date		Date						Date				
Species Code		**Aj**	**Tl**	**Sc**	**Ph**	**Pf**		**Aj**	**Tl**	**Sc**	**Ph**	**Pf**
Arrival Time												
Departure Time												
Abundance	absent (0)											
	uncommon (1-4)											
	common (5-20)											
	very common (21 +)											
Sex	male	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
	female	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
	unknown	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
Stage*	exuvia	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
	teneral	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
	adult	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
Behavior*	mating	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
	egg-laying	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
	emerging	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
	perching	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
	feeding	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
	patrolling	❑	❑	❑	❑	❑		❑	❑	❑	❑	❑
	other											

Comments:

*****See next page for definitions of life stages and behaviors

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Glossary

Stages

exuvia: (pl: exuviae): cast-off skin left behind when the final-instar nymph transforms into and emerges as an adult.

teneral: a newly emerged adult; has weak fluttery flight, incomplete color development, shiny wings, and is not sexually mature; tenerals are fragile and should not be handled.

adult: reproductive individual with full characteristic pigment development.

Behaviors

mating: mating dragonflies form a characteristic and unmistakable shape called the "wheel", in which the male holds the female behind the eyes with structures at the tip of his abdomen, and the female curves her abdomen upwards to contact the sperm-transfer organs on the underside of the male abdomen, closer to the thorax, and often holds on to the end of the male's abdomen with her legs. A mating pair may fly or perch in the wheel formation.

egg-laying/oviposition: depending on species, eggs are laid on the water, or inserted into live or dead plant material or into the sediment. A female laying eggs may be guarded by the male as she flies (the male flies closely above and/or behind her), or she may lay her eggs as they fly in tandem (i.e., the wheel formation of mating has opened, but the male continues holding the female behind the eyes as they fly together). An ovipositing female may be seen flying low along the water and touching the tip of her abdomen down at intervals to release eggs, or perched on vegetation with her abdomen curved and the tip pressed down against the plant material into which she is inserting her eggs.

emerging: final molt, where the late stage nymph climbs out of the water onto a supporting surface, the skin splits along the back, and the new adult pulls itself free of the old nymphal skin (called an exuvia); the wings and abdomen expand, the skin hardens, and the teneral adult is ready for its first flight.

perching: an adult resting on the substrate (rocks, plants, twigs, tree branches, etc.). Different species may perch in a characteristic pose, and perching position may change as the dragonfly attempts to regulate its body temperature (i.e. hanging vertically, wings drooped, abdomen pointed straight up, etc.).

feeding: hunting and consuming prey, which consist of small insects (including other dragonflies and damselflies!); a feeding dragonfly may fly up from a perch to grab its prey, or snatch its prey while in flight. Small prey may be eaten on the wing; consuming larger prey may require the dragonfly to land first. Large feeding swarms of dragonflies may form where prey is abundant.

patrolling: behavior exhibited by some male dragonflies, seen flying back and forth as they defend a fixed territory, or flying continuously around and over the water's surface, sometimes diving at and attempting to scare off other males.