



Photo: Matt Weldon

MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE



Forest Management Recommendations for the Lilypad Clubtail Dragonfly

Background

Damselflies and dragonflies (Order: Odonata) are conspicuous and ecologically important aquatic insects with approximately 155 species documented in Maine. The Lilypad Clubtail (*Arigomphus furcifer*) is one of the state's rarest dragonflies, listed as Special Concern due to low number of populations. The breeding habitat of the Lilypad Clubtail in Maine is primarily shallow lakes and ponds, often with extensive aquatic vegetation.

The larvae of these dragonflies are found in the aquatic benthos where they may require several years to mature. Adults generally emerge in early June and have a flight period that may last through July. Adults forage on smaller aerial insects (mosquitoes, mayflies, etc.) and spend much of their time taking refuge within riparian forest vegetation.

Management Recommendations

Many of Maine's wildlife species require or benefit from intact shoreline forest habitat. MDIFW recommends the following practices, adapted from *Threatened and Endangered Species in Forests of Maine: A Guide to Assist with Forestry Activities* (1999), for the Lilypad Clubtail to protect water quality for larvae and riparian vegetation for adults:

1. **Lacustrine Extent:** Maintain a *150-foot* wide forested riparian management zone around **lakes, ponds, and wetlands** hosting documented occurrences.

Riverine Extent: Maintain a *250-foot* wide forested riparian management zone around **rivers** hosting documented occurrences

2. **Activity within the Riparian Management Zone (0 to 150 feet in lacustrine settings; 0 to 250 feet in riverine settings):**
 - Avoid any harvest activity or disturbance within 50 feet of the high water shoreline
 - Beyond 50 feet, manage with single-tree or small group-selection cuts that maintain a 60-70% canopy cover in an evenly distributed stand
 - Harvest during dry or frozen ground conditions
 - Avoid or minimize the construction of permanent roads or openings
 - Build temporary bridges across all perennial streams prior to any motorized equipment crossing
 - Avoid the use of herbicides and insecticides