



Insects

## Swamp Darner

*Epiaschna heros*

**Priority 3 Species of Greatest Conservation Need (SGCN)**

**Class:** Insects (*Insecta*)

**Order:** Dragonflies And Damselflies (*Odonata*)

**Family:** Darners (*Aeshnidae*)



### General comments:

A few adult modern records but breeding needs to be confirmed; further survey effort needed

### Species Conservation Range Maps:

Town Map: [Epiaschna heros\\_Towns.pdf](#)

Subwatershed Map: [Epiaschna heros\\_HUC12.pdf](#)

### SGCN Priority Ranking - Designation Criteria:

|                                |                                                                                                                                                                                                                                                                              |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>State Special Concern:</b>  | Swamp Darner is listed as a species of Special Concern in Maine.                                                                                                                                                                                                             |
| <b>Understudied Rare Taxa:</b> | Recently documented or poorly surveyed rare species for which risk of extirpation is potentially high (e.g. few known occurrences) but insufficient data exist to conclusively assess distribution and status. *criteria only qualifies for Priority 3 level SGCN*<br>Notes: |

### Professional Discretion:

Current criteria ranked *Epiaschna heros* as SGCN priority 2, however, species should be SGCN priority 3 based on professional discretion.

### Justification:

updated S-rank (SU; possible temporary colonist); limited distribution, rare, specialized habitat

### Habitat Associations:

**Formation:** Freshwater Aquatic

**Macrogroup:** Lotic

**Formation:** Northeastern Upland Forest

**Macrogroup:** Acadian-Northern Appalachian Forest

**Macrogroup:** North Atlantic Coastal Forest & Woodland

**Formation:** Northeastern Wetland Forest

**Macrogroup:** Central Hardwood Swamp Forest

### Threats

No Threats Currently Assigned to Swamp Darner or other Priority 3 SGCN.

Swamp Darner *Epiaschna heros*

## Priority 3 SGCN



## Species Level Conservation Actions:

No Species Specific Conservation Actions Currently Assigned to Swamp Darner or other Priority 3 SGCN.

## Conservation Actions Associated with the Palustrine Odonates Guild:

| Conservation Action                                       | Category              | Biological Priority | Type      |
|-----------------------------------------------------------|-----------------------|---------------------|-----------|
| Conduct a statewide dragonfly/damselfly atlasing project. | Survey and Monitoring | high                | completed |

## Threat(s) Addressed By This Conservation Action

- Education & Outreach
- Lack of knowledge

| Conservation Action                                                                         | Category | Biological Priority | Type |
|---------------------------------------------------------------------------------------------|----------|---------------------|------|
| Increase MDIFW staff capacity for survey, research, and conservation of SGCN invertebrates. | Policy   | critical            | new  |

## Threat(s) Addressed By This Conservation Action

- Education & Outreach
- Lack of knowledge
- Resource Needs

| Conservation Action                                                                                                                                    | Category        | Biological Priority | Type     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------|----------|
| Develop/distribute outreach materials to raise public awareness and appreciation of freshwater aquatic insect ecology, threats and conservation needs. | Public Outreach | moderate            | on-going |

## Threat(s) Addressed By This Conservation Action

- Education & Outreach

| Conservation Action                                                                               | Category              | Biological Priority | Type     |
|---------------------------------------------------------------------------------------------------|-----------------------|---------------------|----------|
| Conduct comprehensive statewide surveys to inform status, distribution, threats, and habitat use. | Survey and Monitoring | high                | on-going |

## Threat(s) Addressed By This Conservation Action

- Lack of knowledge

Swamp Darner *Epiaeschna heros*

## Priority 3 SGCN



| Conservation Action                                                                                                                                                                                                                                | Category           | Biological Priority | Type     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------|----------|
| Develop/distribute Best Management Practices for landowners, land managers and conservation partners to avoid and minimize impacts of intensive land use activities (e.g., forestry, stream crossings, agriculture, development, hydro facilities) | Habitat Management | high                | on-going |

**Threat(s) Addressed By This Conservation Action**

- Roads and Railroads
- Housing and Urban Areas
- Commercial and Industrial Areas
- Domestic and Urban Waste Water
- Agricultural and Forestry Effluents
- Education & Outreach
- Logging and Wood Harvesting
- Annual and Perennial Non-timber crops

| Conservation Action                                                                                                                                                                                                                                           | Category        | Biological Priority | Type     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------|----------|
| Develop/distribute guidelines and outreach materials to inform conservation partners, land use managers, and the general public about the impacts of pesticides on native insects and to promote the alternative use of Integrated Pest Management practices. | Public Outreach | moderate            | on-going |

**Threat(s) Addressed By This Conservation Action**

- Education & Outreach
- Other Threat

| Conservation Action                                                                                                                                                                             | Category | Biological Priority | Type     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------|----------|
| Analyze results of the Maine Dragonfly & Damselfly Survey, research and incorporate external Maine records (historical and modern), and produce a summary document and conservation assessment. | Research | high                | on-going |

**Threat(s) Addressed By This Conservation Action**

- Lack of knowledge

| Conservation Action                                                                                            | Category | Biological Priority | Type      |
|----------------------------------------------------------------------------------------------------------------|----------|---------------------|-----------|
| Update NatureServe S-ranks for all Maine Odonata based on results of the Maine Damselfly and Dragonfly Survey. | Research | high                | completed |

**Threat(s) Addressed By This Conservation Action**

- Lack of knowledge

**Broad Taxonomic Group Conservation Actions:**

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's Wildlife Action Plan: Element 4.

## Swamp Darner *Epiaeschna heros*

### Priority 3 SGCN



### Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's Wildlife Action Plan: Element 4. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

*The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, threats, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work*