Hemaris gracilis (Graceful Clearwing)

Report Date: January 13, 2016

Priority 3 Species of Greatest Conservation Need (SGCN)

Class: Insecta (Insects)

Order: Lepidoptera (Butterflies, Skippers, And Moths)

Family: Sphingidae (Sphinx Moths)

General comments:

Two recent records resulting from Maine Butterfly Survey (Stockton Springs, Old Orchard Beach); previously known only from historic records; distribution was widespread (except Downeast); habitat type (extensive heath lands and openings with heath vegetation) and host plant (blueberry and other heaths) not limiting; true global status uncertain (G3G4); widespread in NB; inadequate survey effort statewide; species is diurnal - may not be well represented in typical moth collection efforts

Species Conservation Range Maps for Graceful Clearwing:

Town Map: <u>Hemaris gracilis_Towns.pdf</u>
Subwatershed Map: <u>Hemaris gracilis_HUC12.pdf</u>

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation: NA

State Special Concern or NMFS Species of Concern:

Hemaris gracilis is listed as a species of Special Concern in Maine.

Recent Significant Declines: NA

Regional Endemic: NA

High Regional Conservation Priority: NA High Climate Change Vulnerability: NA

Understudied rare taxa:

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*

Notes:

Two recent records resulting from Maine Butterfly Survey (Stockton Springs, Old Orchard Beach); previously known only from historic records; distribution was widespread (except Downeast); habitat type (extensive heath lands and openings with heath vegetation) and host plant (blueberry and other heaths) not limiting; true global status uncertain (G3G4); widespread in NB; inadequate survey effort statewide; species is diurnal - may not be well represented in typical moth collection efforts.

Historical: NA

Culturally Significant: NA

Habitats Assigned to Graceful Clearwing:

Formation Name Boreal Upland Forest

Macrogroup Name Boreal Upland Forest

Habitat System Name: Acadian Low Elevation Spruce-Fir-Hardwood Forest **Notes:** *extensive heathlands and barrens with heath openings where host plant (blueberry) present*

Habitat System Name: Acadian Sub-boreal Spruce Flat Notes: extensive heathlands and barrens with heath openings

where host plant (blueberry) present

Formation Name Grassland & Shrubland

Macrogroup Name Ruderal Shrubland & Grassland

Habitat System Name: Powerline Right-of-Way Notes: heath openings where host plant (blueberry) present

Habitat System Name: Ruderal Upland - Old Field Notes: extensive heathlands and barrens with heath openings where

host plant (blueberry) present

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Formation Name Northeastern Upland Forest

Macrogroup Name Central Oak-Pine

Habitat System Name: Central Appalachian Dry Oak-Pine Forest **Notes:** *potential; where extensive heathlands and barrons with heath appalach and this potential; where extensive heathlands and barrons with heath appalach.*

barrens with heath openings with host plant (blueberry) are present

Habitat System Name: Northeastern Interior Pine Barrens **Notes:** *extensive heath openings and barrens where host*

plant (blueberry) present

Macrogroup Name Northern Hardwood & Conifer

Habitat System Name: Laurentian-Acadian Pine-Hemlock-Hardwood Forest Notes: extensive heathlands and barrens

with heath openings where host plant (blueberry) present

Habitat System Name: Northeastern Coastal and Interior Pine-Oak Forest Notes: extensive heathlands and barrens with

heath openings where host plant (blueberry) present

Habitat System Name: Northern Hardwood & Conifer Macrogroup - Unknown Habitat System **Notes:** range of primary habitat system associations unknown; extensive heathlands and barrens with heath openings where host plant (blueberry)

present

Formation Name Peatland

Macrogroup Name Northern Peatland & Fens

Habitat System Name: Northern Peatland Macrogroup - Unknown Habitat System **Notes:** *unclear if uses acid bogs/fens where host plant (blueberry) present*

Stressors Assigned to Graceful Clearwing:

No Stressors Currently Assigned to Graceful Clearwing or other Priority 3 SGCN.

Species Level Conservation Actions Assigned to Graceful Clearwing:

No Species Specific Conservation Actions Currently Assigned to Graceful Clearwing or other Priority 3 SGCN.

Conservation Actions Associated with the Dry Barrens Lepidoptera Guild:

Conservation Action Category: Species Management Biological Priority: critical Type: new

Prepare occurrence maps and pesticide spray consultation guidelines for rare Lepidoptera and distribute to strategic partners including Maine Bureau of Pesticides Control.

Stressor(s) Addressed By This Conservation Action

Agricultural and Forestry Effluents

Conservation Action Category: Habitat Management Biological Priority: critical Type: new

Conduct a statewide review of potential high quality barrens habitat that is threatened by succession and identify strategic habitat restoration actions for implementation by key conservation partners.

Stressor(s) Addressed By This Conservation Action

Fire and Fire Suppression

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife

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Action Plan: Element 4, Table 4-15. 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, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.