Cicindela marginipennis (Cobblestone Tiger Beetle) Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Insecta (Insects) Order: Coleoptera (Beetles) Family: Carabidae (Ground Beetles)

General comments:

Recently discovered, single population; flood scoured cobble/gravel habitat on stream/river islands both limited and vulnerable; COSEWIC Endangered and S1 ranked species in other New England states where known; proposed candidate for Maine Endangered status.

No Species Conservation Range Maps Available for Cobblestone Tiger Beetle

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation:

Maine Status: Endangered

State Special Concern or NMFS Species of Concern: NA

Recent Significant Declines: NA

Regional Endemic: NA

High Regional Conservation Priority:

Committee on the Status of Endangered Wildlife in Canada (COSEWIC):

Status: E, Last Examination: 11/1/2008, Change: New, Canada Occurence: NB

Northeast Regional Synthesis (RSGCN):

Responsibility: High, Concern: High

NatureServe:

Global Rank: G2

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: Recently discovered, single population; flood scoured cobble/gravel habitat on stream/river islands both limited and vulnerable; COSEWIC Endangered and S1 ranked species in other New England states where known; proposed candidate for Maine Endangered stat

Historical: NA

Culturally Significant: NA

Professional Discretion:

Current criteria ranked *Cicindela marginipennis* as SGCN priority 2, however, species should qualify as SGCN priority 1 based on professional discretion.

Justification: Recently discovered, single population; flood scoured cobble/gravel habitat on stream/river islands both limited and vulnerable; COSEWIC Endangered and S1 ranked species in other New England states where known. Candidate species for Maine E/T listing.

Habitats Assigned to Cobblestone Tiger Beetle:

Formation Name Freshwater Aquatic

Macrogroup Name Rivers and Streams

Habitat System Name: Medium River **Notes:** one site only in ME but in other parts of range it is found on cobble in different size rivers

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Formation Name Grassland & Shrubland					
Macrogroup Name Lake & River Shore					
Habitat System Name: Lake & River Shore Macrogroup - Unknown Habitat System **Primary Habitat** Notes: found on river/stream island cobble and is not associated with lakes					
Stressors Assigned to Cobblestone Tiger Beetle:					
		Moderate Severity	High Severity]	
Stronger Drighter Lovel based are	Highly Actionable	Medium-High	High		
Stressor Priority Level based on Severity and Actionability	Moderately Actionable	Medium	Medium-High		
	Actionable with Difficulty	Low	Low		
IUCN Level 1 Threat Other Options					
IUCN Level 2 Threat:	Lack of knowledge				
Severity: Moderate Severity Actionability: Highly actionable					
Notes: Lack of comprehensive survey and monitoring effort to understand population status & trends and ID additional occurrences					
IUCN Level 1 Threat Biological Resource Use					
IUCN Level 2 Threat: Hunting and Collecting Terrestrial Animals					
Severity: Moderate Severity Actionability: Moderately actionable					
Notes: Collection pressure on rare tiger beetles can be a problem, especially when distrubution is extremely limited					
IUCN Level 1 Threat Human Intrusions and Disturbance					
IUCN Level 2 Threat:	Recreational Activities				
Severity: Moderate	verity: Moderate Severity Actionability: Moderately actionable				
Notes: Camping and other activities on cobble bar islands in limited area where this beetle occurs could threaten it					
IUCN Level 1 Threat Natural Systems Modifications					
IUCN Level 2 Threat: Dams and Water Management-Use					
Severity: Moderate	Severity: Moderate Severity Actionability: Moderately actionable				
Notes: Construction of a dams on the single river where this beetle occurs in Maine could have catastrophic results					
IUCN Level 1 Threat Residential and Commercial Development					
IUCN Level 2 Threat:	Housing and Urban Areas				
Severity: Moderate Severity Actionability: Moderately actionable					
Notes: Developm	: Development and accompanying increase in human activities on river cobble bars can threaten this species				
IUCN Level 1 Threat Climate Change and Severe Weather					
IUCN Level 2 Threat: Storms and Flooding					
Severity: Moderate Severity Actionability: Actionable with difficulty					
Notes: Very severe floods could damage or destroy habitat on the single rivere where this beetle occurs in ME					
Species Level Conservation Actions Assigned to Cobblestone Tiger Beetle:					

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*Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

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Conservation ActionCategory: ResearchBiological Priority: highType: newDevelop an improved understanding of habitat and movement ecology to help develop Best Management Practices and other
targeted species conservation actionsType: new

Stressor(s) Addressed By This Conservation Action

Lack of knowledge

Guild Level Conservation Actions:

This Species is currently not attributed to a guild.

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 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.