



# Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife

Route 135, Westborough, MA 01581

tel: (508) 389-6360; fax: (508) 389-7891

[www.nhesp.org](http://www.nhesp.org)

## Bank Tiger Beetle

*Cicindela limbalis*

State Status: **Special Concern**

Federal Status: **None**

**Description:** Tiger Beetles are so named because of their “tiger-like” behavior of chasing down and capturing prey with their long mandibles. The Bank Tiger Beetle, or “Common Claybank Tiger Beetle” (*Cicindela limbalis*), is 11-16 mm in length (Pearson et al. 2006). It is metallic, reddish or purplish brown in color, with a varying degree of metallic green highlights and distinct white maculations (spots and bands) on the elytra (wing covers). The Purple Tiger Beetle, or “Cow Path Tiger Beetle” (*Cicindela purpurea*) is similar. However, the Bank Tiger Beetle has middle maculations (the elongate bars in the middle of the elytra) that are complete, extending to the outer edges of the elytra. On the Purple Tiger Beetle, these maculations do not reach the outer edges of the elytra. In addition, the Purple Tiger Beetle very rarely has front maculations at the humeral angle (the “shoulders”), while the Bank Tiger Beetle almost always does.

**Habitat:** The Bank Tiger Beetle inhabits sparsely-vegetated clay and till banks and cliffs. Larval burrows occur in sloping banks of clay soils (Pearson et al. 2006). In Massachusetts, the Bank Tiger Beetle occurs on morainal deposits of the offshore islands, on eroding cliffs and adjacent beaches.

**Life History:** The Bank Tiger Beetle has a two to three-year life cycle (Knisley & Schultz 1997). Adult beetles emerge in late summer or early fall, overwinter, and are active in spring and early summer, when mating and egg laying occur. Larvae develop through the first summer and autumn, overwinter, and continue development the second spring and summer. If sufficient size is attained, pupation occurs underground by late summer, and adults emerge from their pupae in late summer and early fall of the second year. Otherwise, larvae overwinter a second time and complete development during the second spring and summer, pupating by late summer; in that case, the adults emerge in the late summer and early fall of the third year.



*Cicindela limbalis* ▪ MA: Dukes Co., Gosnold ▪ 4 Sep 2008 ▪ Photo by M.W. Nelson

### Adult Activity Period in Massachusetts

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

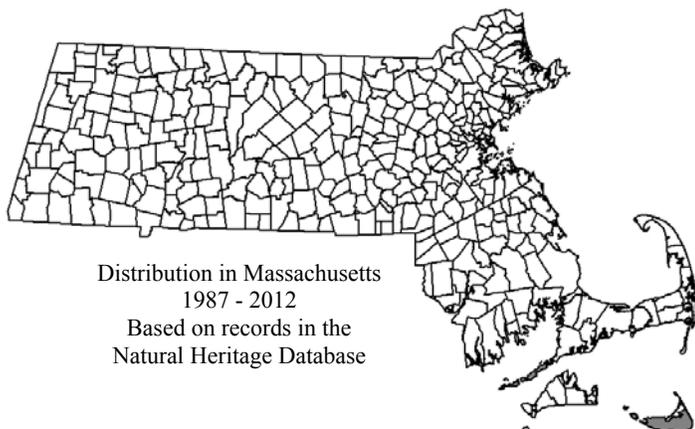
**Geographic Range:** In Massachusetts, the Bank Tiger Beetle appears to be restricted to areas of suitable habitat along the coastline south of Cape Cod. The Bank Tiger Beetle ranges from the Maritime Provinces of Canada south to New Jersey, and west to the Northwest Territories and Colorado (Pearson et al. 2006).

**Status and Threats:** The Bank Tiger Beetle is potentially threatened by bank stabilization activities that disrupt the natural regime of erosion and deposition that create and maintain its dynamic habitat.

### Literature Cited

- Knisley, C.B., and T.D. Schultz. 1997. *The Biology of Tiger Beetles and a Guide to the Species of the South Atlantic States*. Virginia Museum of Natural History Special Publication Number 5. Virginia Museum of Natural History, Martinsville, Virginia. 210 pp.
- Pearson, D.L., C.B. Knisley, and C.J. Kazilek. 2006. *A Field Guide to the Tiger Beetles of the United States and Canada*. Oxford University Press, New York, New York. 227 pp.

**Acknowledgements:** Massachusetts observation data provided by local naturalists, with multiple contributions by T. Simmons. Fact sheet authored by M.W. Nelson, NHESP Invertebrate Zoologist, October 2012.



Updated October 2012

Please allow the Natural Heritage & Endangered Species Program to continue to conserve the biodiversity of Massachusetts with a contribution for ‘endangered wildlife conservation’ on your state income tax form, as these donations comprise a significant portion of our operating budget.