



# Natural Heritage & Endangered Species Program

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## Barrens Tiger Beetle

*Cicindela patruela*

State Status: **Endangered**

Federal Status: None

**Description:** The Barrens Tiger is a predatory beetle, 12-14 mm in length, with an iridescent green body, long slender legs, and white maculations on the elytra (wing covers). Tiger beetles are so named because of their “tiger-like” behavior of chasing down and capturing prey with their long mandibles.

**Habitat:** In Massachusetts, the Barrens Tiger Beetle occurs in sparsely vegetated openings in pitch pine-scrub oak barrens. This species requires patches of bare sand, where adult beetles forage and mate, and where larval beetles construct their burrows and capture their prey. Suitable sand patches result from severe fire or soil scarification, but only areas with little or no vehicle traffic are inhabited.

**Life History:** The Barrens Tiger Beetle has a two-year life cycle. Adult beetles emerge in late August and September, entering diapause by October and overwintering. The adults are active again from late April through early June, when they mate and the females lay eggs. Eggs hatch soon after they are laid, and larvae feed until the fall and spend the first winter in larval diapause. Larvae resume feeding in the spring and complete development by late August or September.

**Range:** The Barrens Tiger Beetle is found from southern New Hampshire south to northern Georgia, and west to Minnesota; populations are rare and localized throughout this range (Pearson et al. 2006). In Massachusetts there is currently only one known population.



Photo by M.W. Nelson

### Adult Activity Period in Massachusetts

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

### Threats

- Habitat loss
- Off-road vehicles
- Fire suppression
- Invasion by exotic plants
- Insecticide spraying

### References

Pearson, D.L., Knisley, C.B., 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.

