

HUDSONIA HARLEM VALLEY BIODIVERSITY MANUAL SUPPLEMENT

Five-lined skink (*Eumeces fasciata*) S3 G5

Habitats in the Study Area

Open rock outcrops, mines and quarries, stone walls, forest clearings with abundant downed logs or other woody debris.

Study Area Distribution

Southeastern Dutchess County, Putnam County, mostly in Hudson Highlands and Taconic Uplands (Gibbs et al. 2007). Occurs at both high and low elevations. More data are needed to document this species' distribution.

Other Relevant Aspects of Ecological Niche and Behavior

Alert and quick-moving over rock surfaces, skinks are difficult to capture. When frightened, a skink will seek the nearest shelter, often a rock crevice or beneath a flat rock. One may even scurry under a hiker's boot or under a person sitting on a ledge. Occasionally runs up trees. Capture may result in loss of the reptile's tail, which breaks off easily and wriggles vigorously when detached, distracting a predator from the real animal. A skink, having sacrificed its tail to escape, will grow another tail, though not as long and perfect as the original.

Description and Identification

One of only three lizards native to New York State, five-lined skink has two yellow lateral stripes and a light gray dorsal stripe, whereas coal skink (western NY) has wide black lateral stripes and an ochre-colored back. Skinks have smooth, glossy scales. Eastern fence lizard (lower Hudson Valley) has rough scales. Mature male five-lined skinks display reddish throats and undersides during the spring breeding season in April or May (Gibbs et al. 2007). Young have blue tails, which probably distract predators from their duller-colored heads.

Threats and Conservation

Until recently, development has been a relatively minor threat because rocky ridges present numerous limitations to landscaping and residential building and use (e.g. hard, irregular rock substrates, overly steep road gradients, lack of water). As more homes are being built on ridges, development becomes more of a threat. Additionally, development of usable land interspersed with rock outcrops could put skink populations at risk by reducing foraging habitat, exposing skinks to traffic, and blocking genetic exchange between isolated groups. Development should be planned so as to preserve habitat blocks of sufficient size to ensure long-term population viability. Some areas of skink habitat may require occasional fires to maintain an open character, and management may therefore require controlled burns at intervals of about 5 to 20 years.

Survey Technique Constraints

In open, rocky crest or slope habitat, skinks are active in warm weather, and may be observed scurrying over rock surfaces. Skinks thermoregulate in relatively cool weather (17-24° C) by basking, but typically very close to a place of shelter. In September and October young-of-the-year with metallic-blue tails are active on rocks, and easy to see. Though the presence of five-lined skink can be ascertained visually, data on numbers

or population densities are harder to obtain. due to the alertness and speed of these reptiles. Where populations are sparse, they are rarely encountered.

References to Identification Literature

Gibbs, J. P., A. R. Breisch, P. K. Ducey, G. Johnson, J. L. Behler, and R. C. Bothner. 2007. The reptiles and amphibians of New York State. Oxford University Press. New York, NY. 422 p.

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Klemens, M. W. 1993. Amphibians & reptiles of Connecticut and adjacent regions (Bulletin Series, No 112). Connecticut State Geological and Natural History Survey, Bulletin 112. Hartford, CT. 318 p.

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