DESCRIPTION: The Barrens Metarranthis (Metarranthis apiciaria) is a geometrid moth with a wingspan of 29-38 mm (Rupert 1943). Both the forewing and hind wing are brown proximal to the postmedial line, and paler tan distally. The wings are speckled with dark brown scales, scattered throughout. On both forewing and hind wing there may be faint patches of darker tan scales in the subterminal area, and there is a brown terminal line. On the forewing, the postmedial line is brown outlined with cream distally; it is very slightly curved, almost straight. The postmedial line on the hind wing is similar, but more curved. The brown antemedial line on the forewing is wavy, but often obscure. The reniform and discal spots are reduced to small, solid, dark brown dots.

As compared to the male, the forewing of the female is elongated and more pointed at the apex (figured at bottom right). In both sexes, the head, thorax, and abdomen are concolorous with the wings. The Heath Metarranthis (Metarranthis pilosaria, a Species of Special Concern in Massachusetts) has a similar wing pattern, but overall it is darker brown above, and on the underside it is bright orange, which is not the case with the Barrens Metarranthis.

HABITAT: In Massachusetts, the Barrens Metarranthis
inhabits open, shrubby areas within pitch pine-scrub oak barrens.

**LIFE HISTORY:** In Massachusetts, adult Barrens Metarranthis moths fly in June. The larval host plants of this species have not been documented. Based on the life history of other *Metarranthis* species, eggs hatch a week or two after oviposition, and larvae grow slowly, not pupating until late August or September. Pupae overwinter.

**GEOGRAPHIC RANGE:** Globally, there are only a few localities where this extremely rare moth is currently known to occur, including the Island of Martha’s Vineyard in Massachusetts, one site in Connecticut, one county in Illinois, and two counties in Indiana (Schweitzer et al. 2011).

**STATUS AND THREATS:** The Barrens Metarranthis is threatened by habitat loss and suppression of fire, which is needed to maintain the open structure of its habitat. Other potential threats include introduced generalist parasitoids, aerial insecticide spraying, non-target herbiciding, off-road vehicles, and light pollution.

**Literature Cited**