

PHOTODOCUMENTATION OF *ERORA LAETA* EARLY HAIRSTREAK (LYCAENIDAE) IN JACKSON COUNTY, AL

T. Wayne Barger and Brian D. Holt
State Lands Division, Natural Heritage Section, AL-DCNR,
64 North Union Street, Montgomery, AL 36130

Erora laeta W.H. Edwards (Early Hairstreak) is an infrequently encountered butterfly in the Lycaenidae (Gossamer-wing Butterflies). On April 8th, 2014 the first photodocumentation was obtained of an Early Hairstreak butterfly in Alabama (Figure 1). The butterfly was recorded near Hytop, AL in Jackson County along a hiking trail on the Walls of Jericho Forever Wild Tract. Precise locality information is withheld due to rarity of the species. After consulting the Butterflies and Moths of North America (BAMONA) website, the Xerces Society for Invertebrate Conservation, and several other sources, it was believed that this was the first documentation of the species for Alabama (Howell and Charny 2010; Ogard and Bright 2010; Opler et al. 2012; Vaughn and Shepherd 2005). However, further research turned up a single previous collection from June 2004 that had been noted by a member of the southern lepidopterist society (Grisham 2004). This 2004 record from Jackson County, AL was not widely known, but likely marked the first scientific collection of the species for Alabama. The 2014 documentation of *Erora laeta* is approximately 100 miles west of the next closest previous siting, east of Chatsworth, GA (Opler et al. 2012; Vaughn and Shepherd 2005). This documentation of Early Hairstreak extends the range of the rarely encountered, mostly tree-top dwelling species. The present photographic documentation and identification follows standards set forth by Opler et al. 2012 for photodocumentation of butterfly species throughout the U.S. In addition, the present observation was also confirmed by the BAMONA coordinator for the state of Alabama.

The butterfly, which was determined to be a female, was very easy to observe and photograph occasionally flying and perching upon the leaf litter along the trail. This behavior follows previous observations of the species made by lepidopterists in other states (Bowers 1978; Klots and dos Passos 1981). No other Early Hairstreaks were observed in the area and subsequent trips yielded no other sightings.

Early Hairstreak, listed as vulnerable by the Xerces Society, is often considered one of the most uncommon and elusive butterflies in the eastern US (Hyatt and Watson 1988; Klots and dos Passos 1981; Nielsen 1973; Scott 1986; Vaughn and Shepherd 2005). The narrow range for the Early Hairstreak is from the northeastern US maritime provinces through southeastern Canada, thinly spread west across northern Michigan and Wisconsin, and south through the Appalachians of North Carolina, Tennessee and Georgia (Klots and dos Passos 1981; Miller 1980; Opler et al. 2012; Sullivan 1971; Vaughn and Shepherd 2005). Although its distribution covers a large area, the Early Hairstreak is considered rare in the peripheral portions of its range and highly localized to uncommon throughout the rest of its scope (Vaughn and Shepherd 2005). Typically preferring mature hardwood forests, Early Hairstreak caterpillars feed on American Beech (*Fagus grandifolia* L.), American Hazelnut (*Corylus* spp.) and various Oak species (*Quercus* spp.) (Klots and dos Passos 1981; Nielsen 1973). Solitary eggs are laid on the underside of leaves, upon which the caterpillar will feed (Klots and dos Passos 1981). Two

Early Hairstreak

broods are thought to be produced in the more northern portion of its range and three in the southern areas. Adult butterflies spend most of their lives in the forest canopy, but may be found puddling/mineralizing on moist hardtack and nectaring on flowers of *Erigeron* spp. (Fleabanes), *Spiraea tomentosa* (Meadowsweet), and *Leucanthemum vulgare* Lam. (Ox-Eye Daisy) (Klots and dos Passos 1981). With *Erora laeta* being a forest-dependent species, activities such as pest spraying or improper forestry management methods are eminent threats to existing populations (Vaughn and Shepherd 2005). Long-term protection of the aforementioned habitat should be considered for conservation of the species.



Figure 1. *Erora laeta* (Early Hairstreak) perching on leaf litter along a hiking trail at the Walls of Jericho Forever Wild Tract, Jackson County, AL.

LITERATURE CITED

- Bowers, D. 1978. Observations on *Erora laeta* (Lycaenidae) in New Hampshire. Journal of the Lepidopterists' Society. 32(2): 140-141.
- Grisham, H. 2004. Hooked At Davis Cove. Southern Lepidopterists' News. 26(2): 34.
- Howell, W.M. and V. Charny. 2010. Butterflies of Alabama. Pearson Learning Solutions: Pearson Press. Boston, MA. 510pp.
- Hyatt, J.A. and C.N. Watson. 1988. The Butterflies and Skippers of the Bays Mountain Area of Northeastern Tennessee. Journal of the Tennessee Academy of Science. 63(3): 69-72.
- Klots, A.B. and C.F. dos Passos. 1981. Studies of North American *Erora* (Lepidoptera, Lycaenidae). Journal of the New York Entomological Society. 89(4): 295-331.
- Miller, L.D. 1980. A Review of the *Erora laeta* Group, With Description of a New Species (Lycaenidae). Journal of the Lepidopterists' Society. 34(2): 209-216.
- Neilsen, M.C. 1973. The Rarest of Northern Butterflies. Newsletter of the Michigan Entomological Society. 18(2): 1-3.
- Ogard, P.H. and S.C. Bright. 2010. Butterflies of Alabama: Glimpses Into Their Lives. University of Alabama Press. Tuscaloosa, AL. 512pp.
- Opler, Paul A., K. Lotts, and T. Naberhaus. 2012. Butterflies and Moths of North America. Data set accessed 04/02/2014. <http://www.butterfliesandmoths.org/>.
- Scott, J.A. 1986. The Butterflies of North America. Stanford University Press. Stanford, CA. 583pp.
- Sullivan, J.B. 1971. Captures of *Erora laeta* in North Carolina (Lycaenidae). Journal of The Lepidopterists' Society 25(4): 295-296.
- Vaughan, D. M. and M. D. Shepherd. 2005. Species Profile: *Erora laeta*. In Shepherd, M. D., D. M. Vaughan, and S.H. Black (Eds). Red List of Pollinator Insects of North America. Portland, OR. The Xerces Society for Invertebrate Conservation. 4pp.