

Banisteria, Number 43, pages 96-98
© 2014 Virginia Natural History Society

HARRIS' CHECKERSPOT (*CHLOSYPNE HARRISII*),
A NORTHERN BUTTERFLY NEW TO THE FAUNA
OF VIRGINIA (LEPIDOPTERA: NYMPHALIDAE).
— Harris' Checkerspot (*Chlosyne harrisii*) is a
distinctively patterned black and orange butterfly that
ranges across Canada from Nova Scotia and Prince
Edward Island west to Manitoba and south in the
United States to Ohio and northern Pennsylvania, with
disjunct populations in northeastern West Virginia
(Opler, 1992; Allen, 1997; Cech & Tudor, 2005). The
species has one adult generation per year in early
summer and the communal larvae build silken nests on
the sole known hostplant, flat-topped white aster
(*Doellingeria umbellata*, formerly *Aster umbellatus*).
Reported habitats of *C. harrisii* include wet pastures,
marshes, bogs, and damp meadows (Opler, 1992; Allen,
1997; Cech & Tudor, 2005). Allen (1997) noted that
adults can be found nectaring in open or brushy upland
areas and are often found along road banks.

Although the closely related and similar Silvery
Checkerspot (*Chlosyne nycteis*) is rather common and
widespread in Virginia (Clark & Clark, 1951; Pavulaan,
1997; personal observations of authors), especially in
the mountains and portions of the Piedmont, Harris'
Checkerspot has not been reported previously from
Virginia. Allen (1997) recorded *C. harrisii* from four
montane counties in northeastern West Virginia, two of
which (Pendleton and Pocahontas) border on Virginia.
Thus, despite the lack of documented records, it seemed
possible that this species might occur in the mountains



Fig. 1. Dorsal view of adult *Chlosyne harrisii* from Highland County, Virginia (photo by Allen Bryan).

of western Virginia in areas where the hostplant is present. Allen (1997) noted that *C. harrisii* is common near Spruce Knob Lake in Randolph Co., West Virginia, but it has not been found by SMR about 15-20 km (9-12 mi) farther south in the Laurel Fork Recreation Area of the George Washington National Forest in extreme northwestern Highland Co., Virginia despite numerous visits spanning the past two decades.

On 10 June 2007, one of us (AB) observed and photographed (Fig. 1) several adult Harris' Checkerspots in a beaver meadow along Straight Fork in northwestern Highland County, apparently the first documented record of this species in Virginia. We visited the site together two weeks later (23 June 2007), but did not find *C. harrisii* on that date, perhaps indicating that the flight season was over or nearly so. A few adults of *C. harrisii* have been found in this same area in subsequent years by us (mostly AB) and several other observers on the following dates: 6 June 2008, 11, 13, and 27 June 2009, 2 and 5 June 2010, 17 and 23 June 2011, and 15 June 2013. Unpublished reports of butterflies observed or collected in this same wetland between the mid-1970s and late 1990s, including visits on 12 and 22 June 1974, 17 July 1982, 22 June 1989, 21 June 1995, and 23 June 1998, do not include *C. harrisii*. Perhaps most of these surveys occurred near the end or after the relatively short flight season of this species.

On 7 June 2010, SMR and Irvine Wilson discovered a second Virginia population of *C. harrisii* in wet meadows along Back Creek west of Hightown, also in northwestern Highland County. A total of 10 adults was observed on that date. A return visit to this site by SMR three weeks later (29 June 2010) did not yield any observations of *C. harrisii*, but several adults were found during the period of 6-10 June 2011. One adult

was observed nectaring on Pennsylvania Blackberry (*Rubus pensilvanicus*) (Fig. 2). This is the southernmost known site for *C. harrisii* in Virginia and perhaps its entire range.

On 15 June 2011, SMR discovered a third Virginia population of *C. harrisii* along an unnamed headwater tributary of Laurel Fork within several hundred meters of the West Virginia state line. This is apparently the largest of the three known Virginia populations of *C. harrisii*; more than 20 adults were seen on this date and at least 25 were observed the following day. Adults were observed nectaring on white clover (*Trifolium repens*) flowers in the lawn of a pond-side cabin, occasionally chasing off conspecifics to gain access to flowers.

Harris' Checkerspot is a peripheral species in Virginia, barely occurring within the state's borders and occupying a very limited portion of northwestern Highland County. All three known locations are within 5 km (3 mi) of the West Virginia state line, and within 10 km (6 mi) of one another. Elevations of these sites range from approximately 884 to 1128 meters (2900-3700 feet) above sea level. Other northern, state-rare butterflies that occur syntopically with *C. harrisii* at one or more sites in Virginia include Pink-edged Sulphur (*Colias interior*), Atlantis Fritillary (*Speyeria*

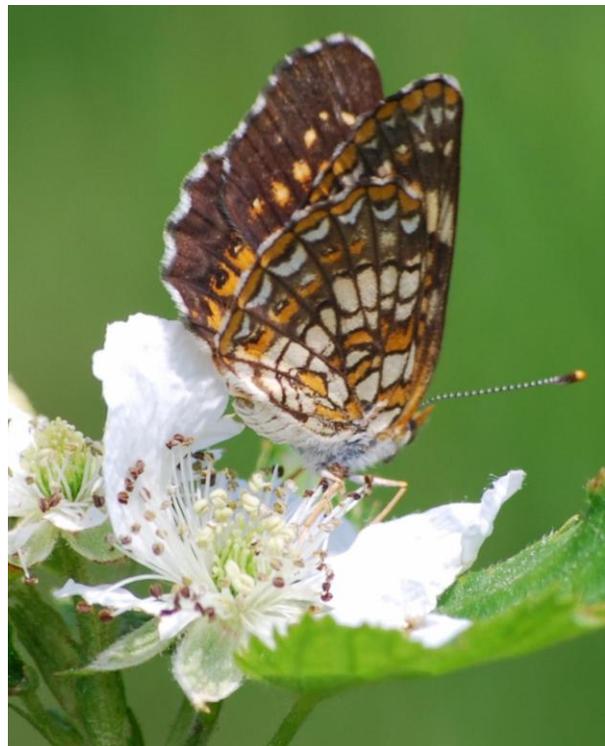


Fig. 2. Ventral view of adult *Chlosyne harrisii* nectaring on Pennsylvania Blackberry (*Rubus pensilvanicus*) in Highland County, Virginia (photo by Steven Roble).

atlantis), Silver-bordered Fritillary (*Boloria selene*), Two-spotted Skipper (*Euphyes bimacula*), and Long Dash (*Polites mystic*). The diurnal arctiid moth *Ctenucha virginica*, another northern species, was collected at one site and Baltimore Checkerspot (*Euphydryas phaeton*), a declining butterfly in the region, was recorded at two of the *C. harrisii* sites.

The Virginia population is assignable to the subspecies *Chlosyne harrisii liggetti* (Avinoff), which is known to inhabit the northeastern United States. It is larger and dorsally darker than the more northerly distributed nominate subspecies. A voucher specimen from the Back Creek site will be deposited in the Virginia Museum of Natural History, Martinsville, VA.

ACKNOWLEDGEMENTS

We thank several private landowners for granting access to their properties, and Allen Belden, Bruce Grimes, Barry Kinzie, Amos Showalter, and David Young for sharing their observations.

LITERATURE CITED

Allen, T. J. 1997. The Butterflies of West Virginia and Their Caterpillars. University of Pittsburgh Press, Pittsburgh, PA. 388 pp.

Cech, R., & G. Tudor. 2005. Butterflies of the East Coast: An Observer's Guide. Princeton University Press, Princeton, NJ. 345 pp.

Clark, A. H., & L. F. Clark. 1951. The butterflies of Virginia. Smithsonian Miscellaneous Collections 116: 1-239.

Opler, P. A. 1992. A Field Guide to Eastern Butterflies. Houghton Mifflin Company, Boston, MA. 396 pp.

Pavulaan, H. 1997. Checklist of Virginia butterflies (1996 revised draft edition). Privately printed, Herndon, VA. 39 pp.

Steven M. Roble
Virginia Department of Conservation and Recreation
Division of Natural Heritage
600 E. Main Street, 24th Floor
Richmond, Virginia 23219

Allen Bryan
1500 Old Compton Road
Richmond, Virginia 23238