Harris' Checkerspot: A Very Particular Butterfly

by Ernest H. Williams

To really understand butterflies, you almost have to be a botanist. Many butterflies are so closely associated with plants that they use the plants as a food source and lay their eggs on them. This is the case with Harris' Checkerspot, which is specifically attracted to the flat-topped white aster (Aster umbellatus). To find Harris' Checkerspots, you need to find flat-topped white aster (Aster umbellatus), the only plant on which females will lay their eggs. The rule is simple: no aster, no butterflies. These butterflies are homebodies; they stay near their plants.

Flat-topped white aster grows in moist meadows from southern Canada throughout the northeastern and north-central United States and southward to Georgia and Kentucky. Although it lies in the back- ground green of other vegetation for most of the summer, one can easily recognize populations of this plant once it flowers in August and September. Then, no surprise here— it lives up to its common name, with numerous white composite (aster-like) flowers arrayed along the taller plants.
Locate the scattered plants more easily, these insects are very sensitive to changes in the color of flowers. A good way to spot them is by looking for their greenish-yellow color near the ground.

Below

Osweego Co. NY

Cheddargrass flowers
A small cluster of Harris’s Cheeseweed on the ground and pond shoreline.

Opposite page:

Harris’s Cheeseweed is a common plant in New York state meadows.

Cheddargrass flowers are greenish-yellow and grow near the ground.

The Cheeseweed’s distinctive flower head is easy to spot in the meadow.
middle of a sea of green — you can walk  
need to dry, sagging, velvet roofs in the  
— once you learn to recognize the webs  
and grow, the feeding webs are conspicuous.
remains. After a week of caterpillar feeding
then go into the feeding web which becomes dark
and is checkered with yellow squares (caterpillar drop),
the webs turn darker and larger’ squares. After eating one
and the cell. They are very nutritious and eaten
get leaves. Then hang up upside down on
stem and then feeding frenzied on the leaf.
pull they soon move to the top of the plant
ready in 70 days. Any eggplant varieties and
The eggs darken a little as they develop.

CATERPILLAR CHALLENGES

Eggs survive equally well.
We wonder if the tiny caterpillars from smaller
bigger. But look at the number of 600 eggs
of a newly hatched female is considerably
in the next two days or so are ready. If it is
by laying one clutch, a female isn’t ready to
5.0, but the second generation lasts until 15.0.
example, the first clutch averages about 20
next, which is almost 1/3 of the female’s fecundity.
measured the reproductive output of these plants.
With the help of several students, we
larger plants often are separated from shorter

inside, which takes them on more than one
reach a middle stage of growth (the third
insect) during which they disperse on new leaves. The caterpillars form two
leaf in the lower portion of the leaf, which
break out of their last, green leaves down
and finally shed to the soil. Only one successful
one. They can enter this stage
up to 90% of the leaf is eaten by caterpillars. Many
in one season is newly populated by a
in a given area. This explains why caterpillars
are highly
in dense forest patches because more caterpillars
are produced and it takes months to reach
may take 300 newly hatched caterpillars
50% by weight. There are no significant
developments into tiny protein meals. That means that
next spring, only 1/10 of those caterpillars will
more than half of those dispersers become active the
outer fringes of the forest. Each species has
data on the leaf let's estimate that only 10% of all caterpillars
and wings impede further dispersal.
its in these small patches of the species at which
Dudder et al. (1997) found
and inter specific interactions while dispersing.
results and analysis with dispersal
of caterpillars can be seen in
a yellow caterpillar. A yellow caterpillar
Put a yellow caterpillar in front of a
this shows how few social insects
is on the plant, without a
the plant without a
the plant. The yellow caterpillar doesn't
caterpillar on the next leaf. It is
out of its best defense, so you would
the scale in which they travel. They move slower
on the forest floor. Some according to running
at different places where they produce. In the
area from which they produce. In the
differs depending on the size of the caterpillar and
the exposure. in the size of the caterpillar and the
the yellow caterpillar in particular
the yellow caterpillar.
in finding another
the yellow caterpillar in a particular
the yellow caterpillar. of course, the direction of
poor plains. 

in the direction of
the plane on which they were born and then
the leaf as they move through the jungle of stems of
are not independent of one another,
neighboring independent of one another,
moving away from it. They disperse semi-
the plane on which they were born and then
the leaf as they move through the jungle of stems of
are not independent of one another,
neighboring independent of one another,
moving away from it. They disperse semi-
the plane on which they were born and then
We hoped while aster, making any a mistake. We
growing aster's, they lay their gees only on our-
some of several different species of held-
שהנקות עם billet, the plant is, in fact, an
only other no ill effects from feeding on food
species, but the food, to our taste, had to most
make the left-popped while aster less bad to most

Another species addressed this. One chemically clean

People with sensitive noses can learn to receive

POWERS, we plant in the same

a l'astson compound named nino-

I hope to find that species a
distinguish odor to the plant,

because of the flowers.

My knowledge, we have discovered that the

flowers of the neighborhood quinoa, My coauthors

compared to other asters. With the help of a

nontceptions to this one plant. First of all, the

have learned a little about the biology's nino-

the answers. Several students of mine and I

let's go pick, although we don't have all

and few other species. Again, we are those pun-

quence, for this one species of

I've been impressed in the species of

RELATIONSHIPS WITH

FLAT-TOPPED WHITE ASTER

To consider the plant the calicatrices eat

cut away, but before deserting that, we have

After they consume, they play a role in a different

simply remain near their own whiteheads. The

seen on the same plant, apparently, they

without a web, several calicatrices are open

White flowers, though independent and

independently, for those in our web, she is

where they emerge the following spring.

White, nearly cease feeding and move into the

months, they cease feeding and move into the
Jays are precocious, juvenile blue jays, found in the eastern United States. Their black, blue, and white plumage is striking, and their calls are a common sound in many wooded areas. Jays are known for their intelligence, as they can solve problems and remember solutions even after being taught. They are also known for their ability to mimic the calls of other birds.

The photograph shows a blue jay perched on a branch, with its black and white plumage clearly visible. The background is a blur of greenery, indicating that the photo was taken in a forested area.

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June 10, 2000, Wood Pond Ridge Reservation, Westchester Co., NY

Opposite page: A chickadee from which an adult had just eclosed.


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Jeffrey Glassberg (C)
The bishop, a native of England, has a distinct pattern known as a "friar". These birds are known for their loud calls and their ability to mimic various sounds. Their population is relatively stable, with no significant decline or increase observed in recent years.

The bishop is adapted to life in open, grassy areas where it can find food and nesting sites. It feeds primarily on insects, which it catches on the wing. The bishop is also known for its bright blue plumage, which helps it to stand out in its habitat.

The bishop's habitat is threatened by habitat loss due to urbanization and agriculture. Efforts are being made to conserve the bishop's habitat by creating protected areas and implementing conservation strategies. The bishop is considered a species of least concern, but continued monitoring is necessary to ensure its long-term survival.
Range of Harris' Checkerspot

Jeffrey Glassberg