

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Invertebrate Abstract

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CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Euphilotes baueri* Shields
COMMON NAME: Bauer's Blue, Bauer's Dotted Blue
SYNONYMS: *Euphilotes battoides baueri*
FAMILY: Lycaenidae

AUTHOR, PLACE OF PUBLICATION: O. Shields, Bulletin of the Allyn Museum 28: 1-36.
1975.

TYPE LOCALITY: West side of Gilbert Pass, 6200 ft., Inyo County, California.

TYPE SPECIMEN:

TAXONOMIC UNIQUENESS: There are at least 11 species in this genus, with 10 occurring in Arizona along with multiple subspecies. According to Resh and Cardé (2003), "There are more than 6000 described species in 640+ genera, and many tropical taxa are not thoroughly studied. Lycaenids occur worldwide, with endemic species even in New Zealand and the Pacific Islands, but the majority occur in the Neotropics and Africa."

DESCRIPTION: Their wingspan is 3/4 - 7/8 inches (1.9-2.2 cm). The male is pale blue above without the orange hind wing band. The female is gray-brown with blue scaling, which is extensive to almost none. There is an orange aurora band on outer edge of the hindwing, ranging from medium to absent. The underside is snowy white with a distinct black line on wing margins. The black spotting is bold. There is a pale orange band on margin of hindwing narrow. (Opler, date unknown). The females have normal fore legs while the males are somewhat smaller and lack claws. They are easy to identify because of their small size and their habit of holding the wings tightly together over the back, exposing the speckled undersurface of the wings. The caterpillars are stocky and slug like.

AIDS TO IDENTIFICATION: Members of the genus *Euphilotes* resemble members of the genus *Icaricia*, but the marginal spots on the underside of the HW (hind-wing) lack iridescent spangles, and the wing fringes are checkered. The members of genus *Euphilotes* resemble one another quite closely; all are found only in the immediate vicinity of their food plants, various species of wild buckwheat (*Eriogonum*). (Tilden and Smith, 1986).

ILLUSTRATIONS:

TOTAL RANGE: Much of Nevada into eastern California and northwestern Arizona. One isolated population in the San Bernardino Mountains of California.

RANGE WITHIN ARIZONA: Northwestern Arizona.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: The larvae of Lycaenidae members, are shaped like a sowbug, with the body segments broadened laterally and the small head retractable and hidden under the thorax; they are green or brown, and are usually covered with short secondary setae, giving a velvety appearance. Species that live in association with ants, are bare. All Lycaenids lack eversible prothoracic glands characteristic of other butterfly caterpillars. Many Lycaenidae have evolved glands at the last abdominal segment that produce a sweet, honeydew-like fluid that is much sought after by ants, which display various behaviors. Some tend and “milk” the larvae on their food plants, thereby presumably warding off parasites and invertebrate predators. Others transport the young caterpillars to their nests, where they are fed by the ants or eat the ant brood. (Resh and Cardé, 2003).

REPRODUCTION: Adults have one flight, mainly from mid-April to late June. The males patrol all day near host plants to find receptive females. The eggs are laid singly on host plant flowers; one brood laid. The caterpillars eat flowers and fruits, and are protected by ants. The chrysalids hibernate in sand or leaf litter. (Opler, No Date).

FOOD HABITS: Caterpillars eat flowers and developing seeds of selected wild buckwheat's including *Eriogonum kennedyi*, *E. ovalifolium*, and *E. strictum*. Adults feed on flower nectar, especially from the *Eriogonum* host plants, and other low nearby plants.

HABITAT: Dry desert slopes and flats with scattered short brush.

ELEVATION: Type locality was found at 6,200 ft. (1,890 m).

PLANT COMMUNITY: Food plants include selected wild buckwheat's including, *Eriogonum kennedyi* (Kennedy Wild-buckwheat), *E. ovalifolium* (Oval-leafed Wild-buckwheat), and *E. strictum* (Strict Wild-buckwheat).

POPULATION TRENDS: Unknown.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None

STATE STATUS: None

OTHER STATUS: None

MANAGEMENT FACTORS: Some population areas may be subject to, or being invaded by, alien weeds, notably cheat grass. If host plant colonies are invaded by cheat grass, native plants may be crowded out or subject to increased fire risk. Such fires could eradicate populations.

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: Maintain habitat together with host plants of all known populations. Survey populations and their susceptibility to invasive alien weeds.

LAND MANAGEMENT/OWNERSHIP:

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:

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