

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

**Invertebrate Abstract**

**Element Code:** IILEP37070  
**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Erynnis scudderi*  
**COMMON NAME:** Scudder's Duskywing, Arizona Duskywing  
**SYNONYMS:**  
**FAMILY:** HesperIIDae

**AUTHOR, PLACE OF PUBLICATION:** Skinner, *Thanaos*. 1914. Trans. American Ent. Soc., 40:215.

**TYPE LOCALITY:** Fort Grant, Arizona.\*

\* Burns, 1964, emphasizes particularly that Fort Grant is a lowland locality and that the type probably came from the flanks of Mt. Graham, Graham County.

**TYPE SPECIMEN:** Holotype in the Carnegie Museum.

**TAXONOMIC UNIQUENESS:** There are approximately 17 species of duskywings in the United States. In Arizona there are 11 species, many of which occur on Coronado National Forest Land. Some Skippers in the genus *Erynnis* are difficult to identify in the field due to similar field marks, similar habitats, similar food plant associations and identical flight periods. *Erynnis scudderi* is nearly impossible to reliably separate in the field from *Erynnis juvenalis* due to the difficulties mentioned above. *Erynnis scudderi* was originally placed in the genus *Thanaos*. There are no described subspecies for *Erynnis scudderi*.

**DESCRIPTION:** Wingspan 31-38 mm.  
Upperside: Black-brown with darker brown patches. The forewing has translucent white spots on the outer half. The hindwing has a white fringe but is otherwise unmarked.

Underside: Marked like that of the upperside but lighter brown.

Antenna: Bent at the tip with a short extension known as an apiculus.

**AIDS TO IDENTIFICATION:** The white fringe on the hindwing (visible from both above and below) will separate *scudderi* from most other skippers. All of the following skippers have white fringes. *Thorybes drusius* (Drusius Cloudywing) lacks brown-black patching on the forewing. *Erynnis tristis* (Mournful Duskywing) has an extra row of white spots underneath the hindwing at the outer edge. *Erynnis pacuvius* (Pacuvius Duskywing) has brown patches overlaying the upperside of the forewing. *Erynnis funeralis* (Funereal Duskywing) has a light brown patch along the top of the upperside of the forewing. *Erynnis juvenalis* (Juvenal's Duskywing) is slightly larger than *E. scudderi* in most cases but otherwise impossible to reliably separate without genitalic dissection. All of the above species are sympatric during all or most of their flight periods. (Brock and Prchal 2001).

**ILLUSTRATIONS:** Color drawing of upperside (Opler and Wright, 1999: Plate 38)  
Color photo of upperside male (Bailowitz and Brock, 1991: Appendix A, Plate IV)  
B&W photo of upperside male (Bailowitz and Brock, 1991: p. 54)  
Color photo of upperside male (Scott, 1986: Plate 42)  
Color drawing of upperside male (Howe, 1975: Plate 92)  
Color photos (Brock and Prchal, 2001)

**TOTAL RANGE:** Found in south and southeastern Arizona, the Animas Mountains of extreme southwestern New Mexico and montane regions of southwestern Texas including Big Bend National Park. From the southwestern United States it then occurs southward through the Sierra Madre of Mexico to as far south as the state of Chiapas.

**RANGE WITHIN ARIZONA:** This species has been found in Cochise, Santa Cruz and Pima counties. It is confirmed from the Dragoon, Huachuca, Chiricahua, Patagonia and Babaquivari Mountains. All but the Babaquivari Mountains are part of the Coronado National Forest. The record for Graham County (see **Type Locality**) has not been reconfirmed. (Brock and Prchal 2001).

### **SPECIES BIOLOGY AND POPULATION TRENDS**

**BIOLOGY:** Adults are rarely encountered below 2000 m (6562 ft). Adult males patrol the summits of hills and mountains within the habitat. Both sexes are attracted to flowers. Records for this species are probably lacking due to the inaccessibility of its high mountain habitat. (Brock and Prchal 2001).

**REPRODUCTION:** The life history of this skipper has not been reported. The early stages are undoubtedly similar to other duskywings. If this is found to be true then the larva will live in a nest constructed of leaves of the host. The larva constructs the nest by tying the leaves together with silk spun from a specialized gland near the mouth. The nest in very early instars may simply consist of a part of the edge of the leaf cut and folded over on top of the larva. Later nests may include two or more leaves. Apparently this concealment is done to prevent predation and parasitism. (Brock and Prchal 2001).

The color of the head capsule of the nature larva is unknown. The top of the head should be pointed on either side. The body should be green as it is with other *Erynnis*. The pupa may be anywhere from green to black. (Brock and Prchal 2001).

**FOOD HABITS:** There are no reported food plants for this species. Many workers suspect oak, based upon adult association and the fact that oaks are used by similar species in the same habitat. (Brock and Prchal 2001).

**FLIGHT PERIOD:** Adults are reported from 20 April to 6 September. There are two broods.

**HABITAT:** Higher elevation oak woodland.

**ELEVATION:** As reported above, adults are rarely encountered below 2000 m (6,562 ft).

**PLANT COMMUNITY:**

**POPULATION TRENDS:**

### **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None  
**STATE STATUS:** None  
**OTHER STATUS:** Forest Service Sensitive (USDA, FS Region 3 1999)

**MANAGEMENT FACTORS:** Difficult to ascertain without more life history information (food plant, etc.) for this species.

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:** An in depth life history study of this species is certainly warranted to further understand its biological requirements and limits. (Brock and Prchal 2001).

**LAND MANAGEMENT/OWNERSHIP:** USFS - Coronado National Forest, and possibly others.

### **SOURCES OF FURTHER INFORMATION**

#### **LITERATURE CITATIONS:**

- Bailowitz and Brock. 1991. Butterflies of Southeastern Arizona. Sonoran Arthropod Studies, Inc.  
Brock, J. and S. Prchal. 2001. Sensitive Insect Species of the Coronado National Forest. A Training Project by Sonoran Arthropod Studies Institute, Tucson, AZ.  
Burns. 1964. Evolution in skipper butterflies of the genus *Erynnis*. Univ. Calif. Publ. Entomology 37:1-216.  
Howe. 1975. The Butterflies of North America. Doubleday.  
Miller and Brown. 1981. A Catalogue/Checklist of the Butterflies of America north of Mexico. The Lepidopterist's Society.  
Opler and Wright. 1999. Western Butterflies. Houghton Mifflin Co.  
Scott. 1986. Butterflies of North America. Stanford Press.  
USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.

#### **MAJOR KNOWLEDGEABLE INDIVIDUALS:**

Jim Brock, Sonoran Arthropod Studies Institute, Tucson, AZ.

#### **ADDITIONAL INFORMATION:**

It is probably not necessary to list this species until its biology is completely ascertained and a survey has been completed to establish the range of this species in the Coronado National Forest. Fully understanding this species is problematic due to the difficulty of field identification and a poor understanding of its ecological requirements. (Brock and Prchal 2001).

**Revised:** 2001-02 (JB)

To the user of this abstract: you may use the entire abstract or any part of it. We do request, however, that if you make use of this abstract in plans, reports, publications, etc. that you credit the Arizona Game and Fish Department. Please use the following citation:

Arizona Game and Fish Department. 2001. *Erynnis scudder*. Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. 3 pp.