

## A CHECKLIST OF THE BUTTERFLIES OF GRANT COUNTY, NEW MEXICO AND VICINITY<sup>1</sup>

CLIFFORD D. FERRIS<sup>2</sup>

College of Engineering, University of Wyoming, Laramie, Wyoming 82071

Little has been published on the butterflies of New Mexico, although the type localities for several species lie in the northern and western portions of the state. Early collecting by H. Skinner and J. Woodgate and later collecting by A. B. Klots forms the basis for much of what we know about its butterfly fauna. Collecting in recent years by D. Cowper, R. Holland and M. E. Toliver has expanded our knowledge. Williams (1914), Hubbard (1965), Toliver (1971) and Holland (1974) have published papers which treat limited geographic areas within New Mexico.

Since 1965, the author has collected actively in the southwestern portion of the state, primarily in Grant County, with some additional collecting in Catron, northern Hidalgo, Luna and western Sierra counties. The area so defined comprises a fairly uniform faunistic region. Although records are available from the Peloncillo Mts. in Hidalgo Co., they are not included as another faunistic region is involved. Hubbard's paper lists butterflies from the Pinos Altos Mts. which lie in Grant Co. His list of 52 species, which excludes the Hesperioidae, represents only a part of the 157 confirmed species in the current study. A checklist of the presently known species appears in a subsequent section of this paper.

### Localities

Most of the collecting was in various areas of the Gila National Forest, on several ranches and with scattered collecting in the desert areas south and southwest of Silver City. The primary forest collecting sites include: the Burro Mts. south of Silver City; the Black Range east of Silver City; Cherry Creek Canyon (Pinos Altos Mts.), Signal Peak and Lake Roberts north of Silver City; and the Mogollon Mts., especially the Willow Creek area, in Catron Co. Sonoran desert localities include: along the Gila River, especially in the vicinity of Red Rock; along State Road 90 between Lordsburg and Silver City; vicinity of Faywood Hot Springs and City of Rocks State Park; and Hatchita.

<sup>1</sup> Published with the approval of the Director, Wyoming Agricultural Experiment Station, as Journal Article no. JA 713.

<sup>2</sup> Research Associate, Allyn Museum of Entomology, Sarasota, Florida; Museum Associate, Los Angeles County Museum of Natural History, Los Angeles, Calif.

Vegetation types of the region are quite varied. Collecting sites in the Mogollon Mts. are generally open Canadian Zone meadows associated with live streams, usually a ponderosa pine (*Pinus ponderosa* Laws.) and willow (*Salix* sp.) association containing a variety of grasses, herbs and shrubs. The Black Range and sites north of Silver City are generally Transition Zone associations with ponderosa pine, pinyon pine (*Pinus monophylla* Torr. & Frem.), Douglas fir (*Pseudotsuga taxifolia* var. *glauca* [Mayr] Sudw.) and aspen (*Populus tremuloides* Michx.) at the higher elevations, and at lower elevations a variety of deciduous trees and shrubs including *Acer*, *Alnus*, *Celtis*, *Cercocarpus*, *Crataegus*, *Prunus*, *Populus* sp. (cottonwood), *Rhus*, *Salix* and *Platanus wrightii* S. Wats. Grasses and herbs abound, especially near permanent water. Canadian Zone vegetation occurs at higher elevations, especially on Signal Peak 9000'. The Burros Mts. are covered primarily with pinyon pine, alligator juniper (*Juniperus deppeana* Steud.) and Emory Oak (*Quercus emoryi* Torr.); several other species of oak are also present. *Acacia greggii* Gray, *Chilopsis linearis* (Cav.) Sweet. and *Prosopis juliflora* (Swartz) DC. occur at lower elevations. Principal vegetation types in the desert areas include grasses, *Acacia*, *Agave*, *Chilopsis*, *Prosopis*, *Yucca* and various cacti. Cottonwood, hackberry (*Celtis* sp.) and other deciduous trees are associated with riparian areas, and outcroppings of oak are common.

Annual rainfall in the Silver City area averages 0.406 meters. The principal moisture occurs in the months January–March, July–October, with the heaviest precipitation during the summer months. July is usually the wettest month and May the driest. The mean temperature is 12.67°C with average highs and lows of 28.55°C and -4.83°C respectively.

Specific collecting sites with alphabetic codes are given below. In several cases where only one or two records are from a locality, no code is used and the localities are clearly shown on the maps (Figs. 1 & 2). Either the code letters or the locality name appears on the maps.

**CATRON COUNTY.** Whitewater Creek and Catwalk area near Glenwood 4800' (**CA**); Datil ca. 7000' (**D**); Gila Cliff Dwellings and EE Canyon 5600–6100' (**EE**); Frisco Hot Springs 4500' (**FS**); Glenwood 4700' (**G**); Gila Wilderness Area (varying elevations) (**GW**); Gilita Creek 7800–8000' (**GW**); Little Creek and Gila River Junction 5750 (**LC**); Luna 7000' (**LN**); Mogollon 6600' (**M**); Pleasanton 4600' (**P**); Pie Town ca. 8100' (**PT**); Quemado Lake 7200' (**QL**); Reserve ca. 5800' (**R**); Silver Creek, crossing at State Road 78 8560' (**SK**); SS Basin T10S, R15W, S21 7600' (**SS**); Willow Creek (camp area) 1800' (**WC**).

**GRANT COUNTY.** Ancheta Canyon 5800–6400' (**AC**); Ash Spring Canyon 6700–6900' (**ASC**); Bayard 5880' (**B**); Black Canyon Camp 7000' (**BC**); Bill Evans Lake 4700' (**BE**); Burro Mountains (Homestead Road and USFS 851) ca. 6650' (**BM**); Bear Mountain 6500–7000' and Bear Mtn. Ranch 6250' (**BR**);

Cliff 4500' (**C**); Copperas Canyon 6000–7400' (**CC**); Cherry Creek Canyon and McMillen Canyon 6700–7300' (**CCC**); Cottonwood Canyon 6300' (**CN**); Dry Gallinas Canyon 6800' (**DGC**); East Canyon, Black Range 7400' (**EC**); USFS 152, Black Range (varying elevations) (**F**); Ft. Bayard, E. of Silver City 6000–6200' (**FB**); Faywood Hot Springs 5000' and City of Rocks State Park 5200' (**FH**); Fierro 6600' (**FI**); Gallinas Canyon area, Black Range 6800–7000' (**GC**); Gold Gulch 5800–5900' (**GG**); Gila River near Gila 4250' (**GR**); East Fork of Gila River ca. 6000' (**GRE**); Hachita 4100' (**H**); Hachita Mountains 4800–6000' (**HM**); Iron Creek Camp, Black Range 7100' (**IC**); Kneeling Nun Vista, Black Range 6990' (**KN**); Kwilylekia Ruins 4550' (**KR**); Lower Gallinas Canyon 6400–6800' (**LGC**); Lake Roberts 6000' (**LR**); L-S Mesa, north of Silver City, USFS 853 6200–6500' (**LS**); Little Walnut Creek 6600' (**LW**); Mule Creek area, Jupe Means Ranch 5800–6300' (**MC**); Mill Creek Canyon 6800–7100' (**MI**); Mogollon Creek 4640' (**MK**); Moon Ranch 5200' and Buckhorn 4800' (**MR**); Pinos Altos 7000' (**PA**); Pine Cienega 6500' (**PC**); Ricolite Canyon near Red Rock 4200' (**RC**); Red Rock 4000' (**RR**); Sherman 5600' (**S**); SA Canyon, Gila Wilderness Area 6800–7400' (**SA**); Silver City 5900–6100' (**SC**); Sapillo Creek 5800–6200' (**SE**); San Lorenzo 5800' (**SL**); Skate's Canyon 6600' (**SN**); Soldier Canyon 6300' (**SO**); Signal Peak 8000–9000' (**SP**); State Road 90, milepost xx between Silver City and Lordsburg (**SR-xx**); Santa Rita 6500' (**ST**); Tyrone 5700–5800' (**T**); Thunderbird Camp (1 mi. N) 6500' (**TC**); Upper Gallinas Canyon 7000' (**UGC**); Vanadium 5950' (**V**); White Signal (vicinity) 6000' (**WS**).

**HIDALGO COUNTY.** Animas 4300' (**A**); Animas Valley 4700–5100' (north-south) (**AN**); Deming ca. 3000' (**DM**); Lordsburg (vicinity) 4240' (**L**).

**LUNA COUNTY.** Columbus (vicinity) 4000' (**CO**).

**SIERRA COUNTY.** Emory Pass area 8200' (**EP**); Kingston 6250' (**K**).

### Checklist

In the list of species which follows, the counties and localities are noted as well as the months in which specimens have been taken. Additional comments are appended when applicable. Excepting the Hesperioidea, the order of families generally follows that proposed by Ehrlich & Ehrlich (1961). Subfamilies are not designated (Hesperioidea excepted) and genera are listed alphabetically according to recent revisionary work. Relative abundance is not noted, as this is strongly seasonal (year-to-year variation) and is affected by climatic conditions. Single specimen records are noted. Several collectors have kindly supplied records which are so designated: (**HA**) Bruce Harris, (**H**) Richard Holland, (**R**) Kilian Roever, (**T**) Michael Toliver, (**Z**) Dale A. Zimmerman. William Baltosser provided the Gila Wilderness records (**GW**).

#### MEGATHYMINAE

*Agathymus aryxna* (Dyar). **Grant Co.:** HM; CCC, WS (Z); T (R, T). **Hidalgo Co.:** AN (T). July, immatures in *Agave palmeri* Engelm.; adults in October.

*Agathymus neumoegeni* (Edwards). **Catron Co.:** M (R). **Grant Co.:** PA; CCC, MC, ST (R). August–October, immatures in *Agave parryi* Engelm.; adults in October.

*Megathyminus coloradensis navajo* Skinner. **Catron Co.:** GW; D, M, PT, R (R). **Grant Co.:** UGC; 7 mi. N of SC (Z); CC, IC, MC, ST, T, WS (R). April–June.

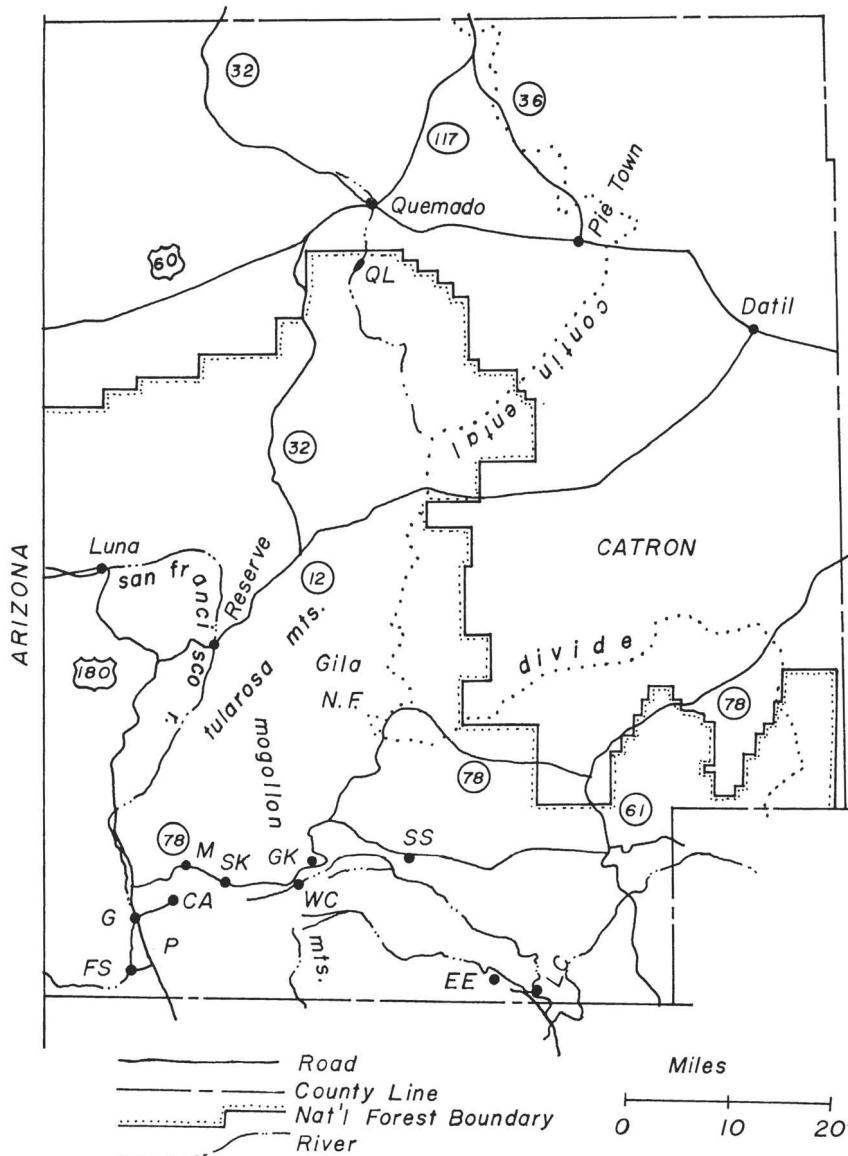


Fig. 1. Collecting sites in Catron Co., New Mexico.

## HESPERIIDAE-PYRGINAE

*Autochton cellus* (Boisduval & LeConte). Catron Co.: EE (Z) **Grant Co.** CCC, SP. July.

*Celotes nessus* (Edwards). **Catron Co.**: CA (Z). **Grant Co.**: RR. May.

*Cogia caicus moschus* (Edwards). **Catron Co.**: G. April. One specimen.

- C. hippalus hippalus* (Edwards). **Hidalgo Co.:** AN (T). August.
- Epargyreus clarus huachuca* (Dixon). **Catron Co.:** GW **Grant Co.:** CCC, EC, IC; SC (Z). May–July.
- Erynnis brizo burgessi* (Skinner). **Grant Co.:** ASC, CCC, EC, F, FB, IC, LS, LW. March–May, July.
- E. funeralis* (Scudder & Burgess). **Grant Co.:** BM, CCC, F, MC, SP, SR–26. April–May, August–September.
- E. icelus* (Scudder & Burgess). **Catron Co.:** SK, WC and vicinity (R). June.
- E. meridianus meridianus* Bell. **Catron Co.:** G, W of M. **Grant Co.:** FB, MC. April, August.
- E. pacuvius pacuvius* (Lintner). **Catron Co.:** GW. **Grant Co.:** CCC, LW, PA. March, May–June, August.
- E. (persius) fredericki* H. A. Freeman. **Catron Co.:** G, LN. **Grant Co.:** CCC, MC, SA, UGC. March–May, August.
- E. telemachus* Burns. **Catron Co.:** G, GW **Grant Co.:** ASC, BM, BR, CCC, EC, F, GC, IC, LGC, LW, SP. March–June.
- E. tristus tatus* (Edwards). **Catron Co.:** G, GW. **Grant Co.:** BM, MC. July–August.
- Pholisora catullus* (Fabricius). **Catron Co.:** G. **Grant Co.:** B, FH, T. August.
- Pyrgus communis* complex. *P. c. communis* and *P. c. albescens* are synchronic and sympatric in some areas. They are widespread in all life zones and are found wherever members of the Malvaceae grow. Males may be positively identified by their genitalia. Only partial records are listed below.
- P. c. albescens* Plötz. **Catron Co.:** G, LC, P, WC. **Grant Co.:** AC, BC, BM, CCC, MC, SL, SO, TC, WC. June–October.
- P. c. communis* (Grote). **Catron Co.:** WC. **Grant Co.:** EC, IC, LS, MC, UGC. May–June, August, October.
- P. scriptura* (Boisduval). **Catron Co.:** G. March. This species is bivoltine in many areas. I have not yet found the summer brood in Catron/Grant Co.
- P. xanthus* Edwards. **Catron Co.:** 3 m. E of M (H); WC area (R). April, June.
- Staphylos ceos* (Edwards). **Catron Co.:** G. **Grant Co.:** GR, RR. **Hidalgo Co.:** AN (T). April–May, July–August.
- Thorybes pylades* (Scudder). **Grant Co.:** AC, BM, CCC, F, LS, MC, TC. **Sierra Co.:** EP. May–August.
- Timochares ruptifasciatus* (Plötz). **Grant Co.:** LW (Z). One specimen on 20–ix–63.
- Zestusa dorus* (Edwards). **Grant Co.:** CCC, EC, IC. April–May.

#### HESPERIIDAE-HESPERIINAE

- Amblyscirtes aenus* ssp. **Catron Co.:** CA (R). **Grant Co.:** CC; CCC, GR, Mimbres Canyon (Mimbres River) (R). May–July. The southwestern race of *A. aenus*, which probably represents an undescribed subspecies, is easily confused with *A. cassus*. Both occur in Grant and Catron Co. They are genitalic distinct entities. In *aenus*, the uncus has two distinct processes on each side and the valva is relatively blunt with the distal end straight up; in *cassus*, the uncus has one distinct and finely tapered process on each side with only a suggestion of the second process, and the distal end of the valva is quite pointed and somewhat recurved. The ventral surface of the forewings exhibits considerably more orange-fulvous color in *cassus* than in *aenus*. The dorsal surface spots in *cassus* are entirely orange-fulvous while they are cream to barely fulvous in *aenus*.
- A. cassus* Edwards. **Catron Co.:** GW. **Grant Co.:** CC, CCC, SP, UGC. July–August.
- A. eos* (Edwards). **Grant Co.:** LS, MC. August.

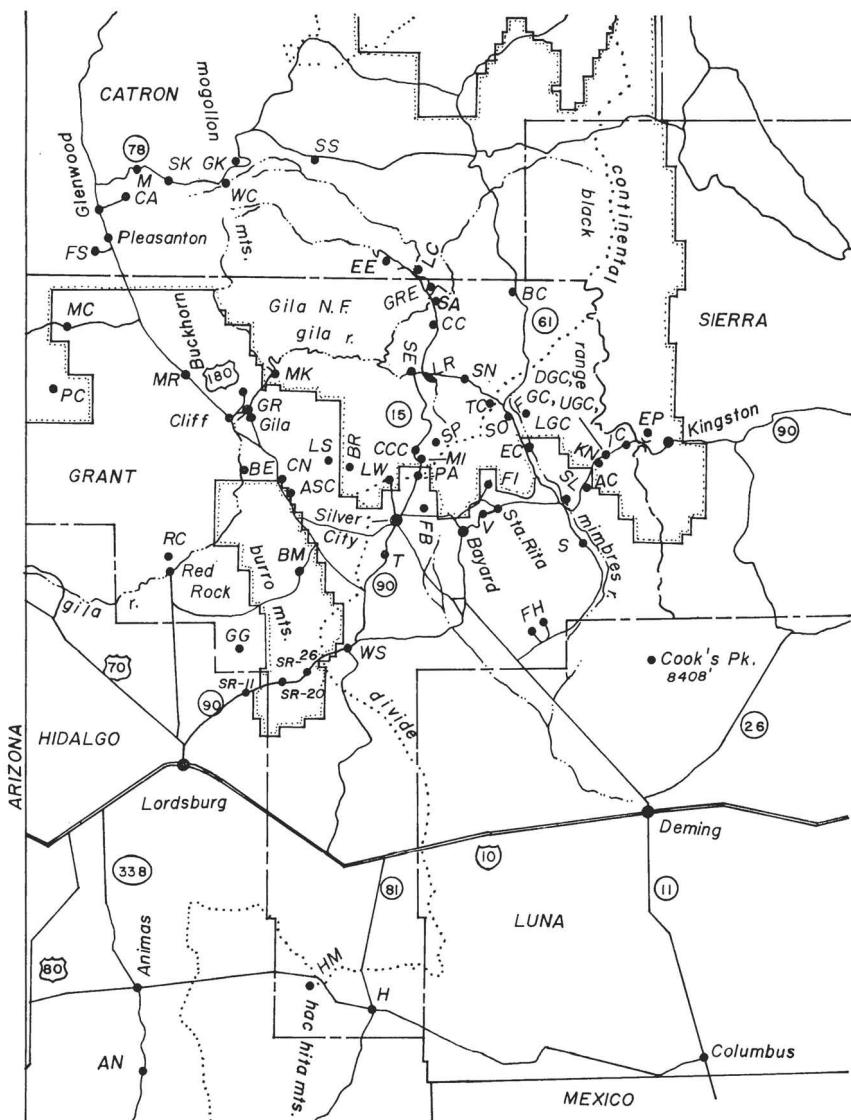


Fig. 2. Collecting sites in Grant Co. and surrounding areas, New Mexico. Note: Fig. 2 is to the same scale and uses the same legends as Fig. 1.

A. exoteria (Herrich-Schäffer). **Catron Co.:** GW. **Grant Co.:** ASC. July.

A. nereus (Edwards). **Grant Co.:** CCC, GRE, (R). July-August.

A. oslari (Skinner). **Catron Co.:** CA (R). **Grant Co.:** MC (R). May-June.

A. phylace (Edwards). **Grant Co.:** TC. July.

A. simius Edwards. **Grant Co.:** LS, MC, SR-26, TC. July-August.

- Atalopedes campestris* (Boisduval). **Grant Co.:** IC. May.
- Atrytonopsis deva* (Edwards). **Catron Co.:** G. **Grant Co.:** CC, CCC. April–June.
- A. lunus* (Edwards). **Grant Co.:** LS. August.
- A. pittacus* (Edwards). **Catron Co.:** G. **Grant Co.:** BR, CCC. March–June.
- A. python* (Edwards). **Grant Co.:** CC; SC (Z). June.
- A. vierecki* (Skinner). **Grant Co.:** BM, CCC, GG, LS, MC; SC (Z). May–June.
- Copaeodes aurantica* (Hewitson). **Catron Co.:** GW. **Grant Co.:** BE, BM, CN, MC, PC, RR; C, SC, T (Z). April–October.
- Euphyes vestris vestris* (Boisduval). **Catron Co.:** EE. **Grant Co.:** CCC. June–July. The correct subspecific name to apply to Rocky Mountain *vestris* is in doubt. Coastal California *vestris* are larger and lighter in color than inland western *vestris*.
- Hesperia harpalus susanae* Miller. **Catron Co.:** GW, WC. July–August.
- H. pahaska pahaska* Leussler. **Catron Co.:** FS. **Grant Co.:** BM, LS, MR, SE, SP, V. May–June, September–October. Specimens from SW Hidalgo Co. are referable to *H. p. williamsi* Lindsay. Grant Co. specimens seem to be nominate *pahaska*.
- H. uncas uncas* Edwards. **Grant Co.:** AC, LS, MC, MR, SC, SR–26. July–September. Intergrading with *H. u. lasus* (Edwards) occurs.
- H. viridis* (Edwards). **Catron Co.:** WC. **Grant Co.:** BR, CC. June–August.
- H. woodgatei* (Williams). **Catron Co.:** FS. **Grant Co.:** MR, TC. July, September–October.
- Oarisma edwardsii* (Barnes). **Grant Co.:** DGC. August.
- O. garita* (Reakirt). **Catron Co.:** WC and vicinity, LN (R). June–July.
- Ochlodes snowi* (Edwards). **Catron Co.:** GW, WC. July–August.
- Piruna pirus* (Edwards). **Catron Co.:** SK (R). **Grant Co.:** GR (R). June.
- P. polingii* (Barnes). **Catron Co.:** GW. **Grant Co.:** CCC, IC. Early July, August. Possibly bivoltine.
- Poanes taxiles taxiles* (Edwards). **Catron Co.:** GW, LC, SK. **Grant Co.:** CCC, DGC, LGC, IC, SP. **Sierra Co.:** EP. July–August.
- Polites themistocles* (Latreille). **Catron Co.:** LN, GK (R). June–July.
- Stinga morrisoni* (Edwards). **Grant Co.:** LGC. April.
- Yvetta carus* (Edwards). **Grant Co.:** MC. August.
- Two species have been collected in the Peloncillo Mountains which may occur elsewhere in Hidalgo Co. or in Grant Co.: *Amblyscirtes texanae* Bell; *Hesperia pahaska williamsi* Lindsay (T). *Hylephila phyleus* (Drury) ought to be common in gardens in the Silver City area, but I know of only one record of a specimen extracted from a car radiator on 30–viii–64 (HA). The vehicle was reported to have come from the Gila Wilderness Area, which means that the specimen came from northern Grant or southern Catron Co. In August, 1970, I saw a large pyrgine-like skipper nectaring at desert willow along the banks of the Gila River south of Red Rock, Grant Co. Because of its position, it was not possible to net it. It exhibited large white hyaline spots on the forewings and appeared to be one of the following: *Polygonus leo arizonensis* (Skinner), *Codatractus arizonensis* (Skinner), *Pyrrhopyge araxes arizoneae* (Godman & Salvini). The latter was quite common at the time in southern Arizona. *P. l. arizonensis* has been taken in the vicinity of Alamagordo, Otero Co. (H).

#### PAPILIONIDAE

*Battus philenor philenor* (Linnaeus). **Catron Co.:** GW, P. **Grant Co.:** FH, MC, SC, SO, RR. June–September. I have sighted numerous adults flying across desert roads in many areas of Grant Co.

*Papilio bairdii bairdii* Edwards. **Catron Co.:** G. A single female of typical Cali-

- fornia *bairdii* phenotype, 8-vi-66. Hubbard lists a questionable record from the Pinos Altos Mtns., Grant Co. See comments under *P. polyxenes*.
- P. cresphontes cresphontes* Cramer. **Grant Co.:** BM, CCC, SC, WS vicinity (Z). June–August.
- P. multicaudata* (Peale MS.) Kirby. **Catron Co.:** GW, SK; G (Z). **Grant Co.:** CCC, EC, IC, LGC, LS, SP; BM, RR (Z). **Grant-Hidalgo Co.** line on State Road 90. March, May–August.
- P. polyxenes* complex. Possibly all *polyxenes*-like specimens from the area should be referred to this species. Three specimens have been taken which in facies resemble *P. rudkini clarki* Chermock & Chermock, based upon comparison with paratypes of *clarki*. These are from **Grant Co.:** LR, 11-viii-68, a fresh male; RR, 3-vi-73, two females.
- P. polyxenes asterius* Stoll. **Grant Co.:** H, LR, LGC, LS; SC, SP (Z). May, August. The subspecific name *asterius* has been applied, but specimens from Grant Co. are rather different from eastern *asterius*.
- P. rutulus arizonensis* Edwards. **Catron Co.:** G, GW. **Grant Co.:** CCC, EC, SP. May–June.

#### PIERIDAE

- Appias drusilla poeyi* (Butler). **Grant Co.:** SC (Z). One specimen on 24-vi-71.
- Anthocharis sara inghami* Cunder. **Catron Co.:** CA, G, GW, LC. **Grant Co.:** ASC, CCC, GR, LGC, LW, RR, UGC; C, SC (Z). March–April.
- Colias alexandra* ssp. **Catron Co.:** GW, SK, WC. June, August. See discussion of this subspecies in Ferris (1973).
- C. eurytheme* Boisduval. **Catron Co.:** G, GW, LC, P, SK, WC. **Grant Co.:** BM, CCC, H, IC, LS, MC, RR, SP. **Hidalgo Co.:** L; 20 mi. S of H (Z). March–September.
- C. philodice eriphyle* Edwards. **Grant Co.:** C, GR, SC (Z). April, September, November.
- Colias (Zerene) cesonia* (Stoll). **Catron Co.:** GW, LC. **Grant Co.:** AC, MK, SC; 5 mi. S of C, 8 mi. W of SC (Z); CCC, IC (T). March, June–November.
- Euchloe hyantis lotta* (Beutenmüller). **Grant Co.:** CCC, GR, SP. March, May.
- Eurema mexicana* (Boisduval). **Grant Co.:** BR, CCC, CN, FB, LGC, SC, SP. **Hidalgo Co.:** L. April–October.
- E. nicippe* (Cramer). **Catron Co.:** G, P. **Grant Co.:** CCC, FH, H, LGC, MC, RR, SR-26. **Hidalgo Co.:** L. March–September. Common and widespread.
- Nathalis iole* Boisduval. **Catron Co.:** GW. **Grant Co.:** B, BM, CCC, IC, LGC, LS; 6 mi. E of SC (Z). April–September.
- Neophasia menapia menapia* (Felder & Felder). **Catron Co.:** GW; WC (Z). **Grant Co.:** CCC, SP; PA (Z). July. Associated with ponderosa pine.
- Phoebe agarithe agarithe* (Boisduval). **Catron Co.:** P. Single female on 22-viii-71.
- P. sennae eubule* (Linnaeus). **Catron Co.:** G, GW, P. **Grant Co.:** C, FH, LS, RR, SC, ST. **Hidalgo Co.:** L. August–September.
- P. sennae marcellina* (Cramer). **Grant Co.:** A, AN, UGC; BM (Z); CCC, IC (T). **Luna Co.:** CO. April, August–September.
- Pieris napi mogollon* Burdick. **Catron Co.:** GW, SK, WC. May, August.
- P. protodice protodice* (Boisduval & LeConte). **Catron Co.:** GW, LC, WC. **Grant Co.:** AC, CCC, EC, F, FB, IC, LS, MC, PC, RR, SP; LW, T, SC (Z). **Hidalgo Co.:** L. **Luna Co.:** 20 mi. S of DM (Z). March–April, form *vernalis* Edwards; June–September.
- P. rapae* (Linnaeus). **Catron Co.:** GW. **Grant Co.:** B; SC (Z). March–April, June, October.
- P. sisymbrii elivata* (Barnes & Benjamin). **Catron Co.:** CA. **Grant Co.:** CCC, EC, F, GC, GR, IC, LW, UGC; SC (Z). March–May.

## RIODINIDAE

- Apodemia mormo* nr. *mejicanus* (Behr). **Catron Co.**: CA (Z). **Grant Co.**: BE, BM, LS; CCC, SC (Z). **Hidalgo Co.**: SR-11. May-June, August.  
*A. nais* (Edwards). **Catron Co.**: GW. **Grant Co.**: CCC, MI, PA. June-July.  
*A. palmerii palmerii* (Edwards). **Catron Co.**: FS. **Grant Co.**: GR, RR. **Hidalgo Co.**: L. **Luna Co.**: DM. June, August-September.  
*Calephelis nemesis nemesis* (Edwards). **Grant Co.**: RR. Single fresh male on 18-vi-72.  
*Emesis zela cleis* (Edwards). **Catron Co.**: CA, GW. May.

## LYCAENIDAE

- Atlides halesus halesus* (Cramer). **Grant Co.**: AC, BM, BR, S, SR-26; 9 mi. S of C, SC (Z). **Luna Co.**: Cook's Peak summit (Z). March-April, August-September.  
*Brephidium exilis exilis* (Boisduval). **Grant Co.**: FH, KR, RR, SP, T; MK, SC (Z). June-October.  
*Callophrys (Callophrys) apama apama* (Edwards). **Grant Co.**: CCC. June-July.  
*Callophrys (Incisalia) augustinus annetteae* (dos Passos). **Grant Co.**: LGC, LS; SC (Z). April-June.  
*C. eryphon eryphon* (Boisduval). **Catron Co.**: LN, SK, WC (R). **Grant Co.**: IC (R). May-June.  
*Callophrys (Mitoura) siva siva* (Edwards). **Catron Co.**: EE, GW. **Grant Co.**: BM, CC, CCC, FB, FI, GC, LS; SC (Z). April-July.  
*C. spinetorum* (Hewitson). **Catron Co.**: GW, WC. **Grant Co.**: CCC, F, IC; SP (Z). May-June.  
*Celastrina argiolus cinerea* (Edwards). **Catron Co.**: G, GW, SK, WC. **Grant Co.**: BM, CCC, IC, PC, RR, SN, SP; SC (Z). March-October.  
*Erota quaderna sanfordi* dos Passos. **Grant Co.**: BR, CCC, LGC. February-May.  
*Euristrymon ontario ilavia* (Beutenmüller). **Grant Co.**: BM, MC. May-June.  
*Everes amyntula herri* (Grinnell). **Catron Co.**: EE, GW, SK. **Grant Co.**: CCC, EC, F, IC, SP; SC (Z). **Hidalgo Co.**: AN. April-May, August.  
*Glaucopsyche lygdamus arizonensis* McDunnough. **Catron Co.**: GW. **Grant Co.**: CCC, F, SP. April-May.  
*Hemiarugs ceraunus gyas* (Edwards). **Catron Co.**: EE, G. **Grant Co.**: AC, SR-26. **Hidalgo Co.**: L. June-August.  
*H. isola alce* (Edwards). **Catron Co.**: GW, LC. **Grant Co.**: AC, BC, BM, CCC, EC, FH, LS, MC, RR, SC, SE, T. **Hidalgo Co.**: L. **Sierra Co.**: EP. April-December.  
*Hypaurotis crysalus* (Edwards). **Catron Co.**: GW; CA (Z). **Grant Co.**: SP. July, September.  
*Leptotes marina* (Reakirt). **Catron Co.**: GW. **Grant Co.**: BM, FH, IC, RR, SR-20; CCC, SC (Z). **Hidalgo Co.**: L. April-September. A widely distributed species.  
*Lycaeides melissa* nr. *pseudosamuelis* Nabokov. **Catron Co.**: GW, LC, LN. **Grant Co.**: LR, SA. August-September. Specimens are phenotypic *pseudosamuelis*.  
*Lycaena arota schellbachii* Tilden. **Catron Co.**: SK. August.  
*Ministrymon ines* (Edwards). **Grant Co.**: BM. One female on 24-v-75.  
*M. leda* (Edwards). **Grant Co.**: BM, RR; CCC (Z). May-June.  
*Phaeostrymon alcestis oslari* (Dyar). **Grant Co.**: SR-20. July.  
*Plebejus (Icaricia) acmon texanus* Goodpasture. **Catron Co.**: G, GW, LC, WC. **Grant Co.**: AC, BM, CCC, F, FH, GC, IC, LS, MC, PC, SN, SP, SR-26; C, SC (Z). **Hidalgo Co.**: L. **Sierra Co.**: EP. April-October.  
*P. icarioides buchholzi* dos Passos. **Grant Co.**: CCC, SP. June.  
*Plebejus (Plebejus) saepiolus* nr. *gertschi* dos Passos. **Catron Co.**: SK, WC and vicinity (R). June.

*Shijimiaeoides battoides centralis* (Barnes & McDunnough). **Grant Co.:** LGC. One fresh male on 8-viii-75. Genitalia checked to verify species. See Shields (1974) for generic discussion.

*S. rita rita* (Barnes & McDunnough). **Grant Co.:** AC, BM, SC, SR-26, T. **Hidalgo Co.:** AN, SR-13 (T). August.

*Strymon melinus franki* Field. **Catron Co.:** GW, LN. **Grant Co.:** BC, BM, CCC, F, GR, MC, RR, SC, SE, SN, T. **Hidalgo Co.:** L. April–October.

#### LIBYTHEIDAE

*Libytheana bachmanii* ssp. **Catron Co.:** FS. **Grant Co.:** FH, GR, MK, RR; SC (Z). March, August–September, November. In a series of specimens from this region, individuals can be assigned to both *bachmanii* (Kirtland) and *larvata* (Strecker).

#### NYMPHALIDAE

*Agraulis vanillae incarnata* (Riley). **Grant Co.:** SC. July–August. Scarce.

*Anaea andria andria* Scudder. **Catron Co.:** EE, G. **Grant Co.:** BM, CCC, GR, RR, SR-26; MK, SC, 6 mi. W of SC, T (Z). **Grant-Hidalgo Co.** line along State Road 90. March–April, August–September.

*Asterocampa celtis montis* (Edwards). **Catron Co.:** GW. **Grant Co.:** FH, GR. **Sierra Co.:** K. June, August–September.

*Chlosyne gabbii sabina* (Wright). **Catron Co.:** G. **Grant Co.:** CCC, IC, LGC, SA; SC (Z). March–May, July.

*C. lacinia crocale* (Edwards). **Catron Co.:** G, GW. **Grant Co.:** B, BR, CCC, FB, FH, GR, KR, MC; SC, WS (Z). **Hidalgo Co.:** L. **Sierra Co.:** K. April, June, August–September. All specimens are referred to *crocale*, although individuals may be selected from a large series which are phenotypic *adjutrix* Scudder, *nigrescens* (Cockerell) and *rufescens* (Cockerell). This region probably forms a blend-zone for the Texas *adjutrix* and the Arizona White Mtns. *crocale*.

*C. nycteis drusius* (Edwards). **Catron Co.:** SK. June.

*Cynthia annabella* Field. **Catron Co.:** GW. **Grant Co.:** CCC, V; SC, T (Z). August–October.

*C. cardui* (Linnaeus). **Catron Co.:** WC. **Grant Co.:** BM, CCC, F, LS, MC, SC, WS; 5 mi. S of C (Z). **Hidalgo Co.:** AN (T). March–September.

*C. virginianensis* (Drury). **Catron Co.:** GW, SK. **Grant Co.:** BM, CCC, F, IC, LR, SP; SC (Z). **Hidalgo Co.:** AN (T). April–June, August–October.

*Danaus gilippus strigosus* (Bates). **Catron Co.:** G, GW. **Grant Co.:** CCC, FH, GR, MC, RR; 5 mi. S of C, SC (Z). **Hidalgo Co.:** L. May–September.

*D. plexippus plexippus* (Linnaeus). **Catron Co.:** GW, LC. **Grant Co.:** C, FB, FH, MC, SC, SR-26, S; BM, 10 mi. S of C, 5 mi. W of SC, T (Z). June–September.

*Dymasia dymas dymas* (Edwards). **Grant Co.:** RR. May–June, September.

*Euphydryas anicia alena* Barnes & Benjamin. **Catron Co.:** CA. **Grant Co.:** 5–6 mi. NW of SC (Z). March–April.

*Euptoieta claudia* (Cramer). **Catron Co.:** GW, P, SK, WC. **Grant Co.:** AC, BM, BR, CCC, EC, F, FH, LS, MC, RR, SP, T; SC (Z). **Hidalgo Co.:** A. April–October. Widespread and common in all life zones.

*Limenitis archippus obsoleta* Edwards. **Grant Co.:** C (Z). **Hidalgo Co.:** L. July–September.

*L. astyanax arizonensis* Edwards. **Catron Co.:** GW, LC, SK. **Grant Co.:** CCC, LGC, MI; SC (Z). June–September, November.

*L. weidemeyerii angustifascia* Perkins & Perkins. **Catron Co.:** GW, SK, WC. **Grant Co.:** BC, CCC, IC, LGC; C (Z). June–August.

- Limenitis (Adelpha) bredowii eulalia* (Doubleday). **Catron Co.:** GW. **Grant Co.:** CCC, LS, MI, SC; 6 mi. SW of T (Z). May–September, November.
- Nymphalis antiopa* (Linnaeus). **Catron Co.:** GW, WC. **Grant Co.:** B, BM, CCC, LGC; SC (Z). April–September.
- N. californica californica* (Boisduval). **Catron Co.:** GW. **Grant Co.:** CCC; SP (Z). March, June–July, October.
- N. milberti furcillata* (Say). **Catron Co.:** GW, WC. August.
- Phycoides campestris camillus* Edwards. **Catron Co.:** G, GW, LC, WC. **Grant Co.:** H. **Hidalgo Co.:** L. August–September.
- P. mylitta arizonensis* Bauer. **Catron Co.:** LN, SK. **Grant Co.:** BM, C, CCC, DGC, SA, UGC. **Sierra Co.:** EP. March–September. See Howe (1975) for nomenclature.
- P. picta picta* Edwards. **Catron Co.:** G, LC, LN. **Grant Co.:** H, SA. **Hidalgo Co.:** L. May, August–September.
- P. tharos* (Drury). **Catron Co.:** G. **Grant Co.:** C, GR, KR. August–September. Several distinct forms are commonly collected, including *distincta* Bauer.
- Phycoides (Anthanassa) texana texana* (Edwards). **Grant Co.:** CCC, RR. May–June.
- Poladryas minuta arachne* (Edwards). **Catron Co.:** WC. **Grant Co.:** CCC, IC, SP. June–August. See Scott (1974) for nomenclature.
- Polygonia interrogationis* (Fabricius). **Grant Co.:** SC. One specimen on 3–xi–62; 6 mi. S of C. One specimen on 10–x–63 (Z).
- P. satyrus* (Edwards). **Catron Co.:** WC. **Grant Co.:** CCC, IC, SP; SC (Z). May–August.
- P. zephyrus* (Edwards). **Catron Co.:** GW, SK, WC. **Grant Co.:** SP (Z). One specimen on 30–vi–74; May, August in Catron Co.
- Precis lavinia coenia* (Hübner). **Catron Co.:** GW. **Grant Co.:** BM, GR, KR, LGC; CCC, SC (Z). June–August, October. One male was taken at the Gila River locality on 10–viii–75 which is very close to *nigrosuffusa* (Barnes & McDunnough).
- Speyeria atlantis nausicaa* (Edwards). **Catron Co.:** GW, SK, WC. **Grant Co.:** CC, CCC, IC, SP. May–August.
- S. nokomis nitocris* (Edwards). **Catron Co.:** LC, WC. August–September.
- Texola elada perse* (Edwards). **Grant Co.:** BE, GR, RR. May–June, August.
- Thessalia alma* (Strecker). **Catron Co.:** GW, SS. **Grant Co.:** BM; 3 mi. N of WS (Z). June–July, September.
- Thessalia theona thekla* (Edwards). **Grant Co.:** BM, BR, CCC, GR, SC, WS. **Hidalgo Co.:** AN (T). May–June, August, October.
- Vanessa atalanta rubria* (Fruhstorfer). **Catron Co.:** GW. **Grant Co.:** FB; SC (Z). **Hidalgo Co.:** A. June–September.

#### SATYRIDAE

- Cercyonis meadii* ssp. **Catron Co.:** M (R) **Grant Co.:** MC (R). August. Intensive searching for this species during August, 1975 in both Catron and Grant Cos. failed to produce a single specimen.
- Cercyonis oetus charon* (Edwards). **Catron Co.:** GW, WC. July–August.
- Cyllopsis pertepida dorothaea* (Nabokov). **Grant Co.:** BM, BR, FB, KN, LGC, LS, SC; CCC, 3 mi. N of WS (Z). **Sierra Co.:** EP. June–September. See Miller (1974) for nomenclature and additional comments.
- Gyrocheilus patrobias tritonaria* (Edwards). **Catron Co.:** M (Z). **Grant Co.:** CCC, FB, UGC. **Sierra Co.:** EP. September–October.
- Megisto rubricata cheneyorum* (R. L. Chermock). **Catron Co.:** GW. **Grant Co.:** CCC, FB, LGC; SC (Z). June–August. See Miller (1976).
- Neominois ridingsii* ssp. **Catron Co.:** SS. One fresh male on 17–vi–72.

*Oeneis alberta daura* (Strecker). **Catron Co.**: Crest Trail off State Road 78 (R). June.

*Asterocampa leilia leilia* (Edwards) and *Eurema proterpia* (Fabricius) have been taken in the Peloncillo Mountains and may stray into the Silver City area. On 23-viii-73, D. A. Zimmerman saw a specimen of *Heliconius charitonius vasquezae* Comstock & Brown at the north edge of the Western New Mexico University campus. The specimen was not captured, but Zimmerman is quite familiar with the species as he has collected it in Florida and the Neotropics.

#### ACKNOWLEDGMENTS

The author wishes to thank Michael E. Toliver and Richard Holland, both of Albuquerque, New Mexico, for providing records and commenting critically concerning the first draft of this paper. Bruce Harris, Clear Lake, South Dakota, Kilian Roever, Phoenix, Arizona, and Dr. Dale A. Zimmerman, Silver City, New Mexico kindly provided many additional records. Dr. John P. Hubbard, New Mexico Department of Game and Fish, Santa Fe and William Baltosser, Silver City, generously provided records from the latter's collecting trips into the Gila Wilderness Area during 1975. Special thanks are due the author's cousin, Ralph A. Fisher, Jr., who lives in the Silver City area. He made a major contribution to the paper by collecting specimens over a ten-year period. Many of the early spring and late fall records are a result of his efforts. He also provided elevation data and other information used in the paper.

#### LITERATURE CITED

- EHRLICH, P. R., & A. H. EHRLICH. 1961. How to know the butterflies. W. C. Brown, Dubuque. 262 p. + viii.
- FERRIS, C. D. 1973. A revision of the *Colias alexandra* complex (Pieridae) aided by ultraviolet reflectance photography with designation of a new subspecies. *J. Lepid. Soc.* 27: 57-73.
- HOLLAND, R. 1974. Butterflies of six central New Mexico mountains, with notes on *Callophrys (Sandia) macfarlandi* (Lycaenidae). *J. Lepid. Soc.* 28: 38-52.
- HOWE, W. H. (EDTOR). 1975. The butterflies of North America. Doubleday & Co., New York. 633 + xiii p., 97 plates.
- HUBBARD, J. P. 1965. Some butterflies of the Pinos Altos Mountains, New Mexico. *J. Lepid. Soc.* 19: 231-232.
- MILLER, L. D. 1974. Revision of the Euptychiini (Satyridae), 2. *Cyllopsis* R. Felder. *Bull. Allyn Mus. Ent.* No. 20. 98 p.
- . 1976. Revision of the Euptychiini (Satyridae), 3. *Megisto* Hübner. *Bull. Allyn Mus. Ent.* No. 33. 23 p.
- SCOTT, J. A. 1974. Adult behavior and population biology of *Poladryas minuta*, and the relationship of the Texas and Colorado populations. *Pan Pacif. Ent.* 50: 9-22.
- SHIELDS, O. 1974. Studies on North American *Philotes* (Lycaenidae). *Bull. Allyn Mus. Ent.* No. 19. 10 p.
- TOLIVER, M. E. 1971. Preliminary notes on the butterflies of Roosevelt County, New Mexico. *J. Lepid. Soc.* 25: 213-214.
- WILLIAMS, R. C., JR. 1914. One hundred butterflies from the Jamez [sic] Mountains New Mexico (Lepid.), with notes and descriptions of a new species. *Ent. News* 25: 263-268.