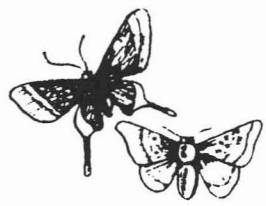
THE LEPIDOPTERISTS' SOCIETY EST. 1947

NEWS

of the LEPIDOPTERISTS' SOCIETY

No. 3 May/June 1985

EDITOR
June Preston
832 Sunset Dr.
Lawrence, KS 66044
U.S.A.



CULTURING A DETRITIVORE, CALYCOPIS ISOBEON (Butler & Druce)

Calycopis isobeon (Butler and Druce) and its congener, C. cecrops (Fabricius), have long presented a puzzle to students of lycaenid early stages. As early as 1948, Hessel (Journ. N. Y. Ent. Soc. 56:243-244) discovered that C. cecrops not only occurs as far north as New Jersey, but that it tends to crawl about on the ground under vegetation--a behavior little observed among other hairstreaks. In 1951 Rawson and Hessel (Bull. Brooklyn Ent. Soc. XLVI:3, pp. 79-84) published a life history of C. cecrops, and assumed by its close association with mountain sumac (Rhus copallina) that this was the primary foodplant. Similar assumptions were made by Gifford and Opler in 1983 (Journ. Lep. Soc. 372, pp. 97-105) who reared the species on wax myrtle (Myrica cerifera) and staghorn sumac (Rhus typhina), and who also state that "oak may be selected on occasion." But behind all these reports lies the striking fact that both Calycopis species oviposit on dead materials on the ground and not on any green plants. Considerable imagination was required to discover that both species probably feed on detritus rather than fresh plants, and experiments with isobeon have proven this to be the case in central Texas.

Like C. cecrops, C. isobeon oviposits on the ground, usually in deep shade, placing eggs on the undersides of dead leaves, dirt clods, stems, twigs, and seeds. There the eggs can withstand immersion in water for up to 86% of the life of the egg, and the larvae are free to choose food sources from the surrounding detritus. In the laboratory, eggs may be easily obtained by confining females over forest litter and supplying them with fresh flowers. At room temperature they may be kept alive for days or weeks and will oviposit freely on almost any substrate.

In the spring of 1981 and 1982, 450 eggs were thus obtained and several broods of C. isobeon were reared. At that time no foodplant was known, although local associations with poison ivy (Rhus toxicodendron and live oak (Quercus virginiana) suggested these plants as possibilities. Larvae were reared to maturity on poison ivy and through the fourth instar on oak. Don Harvey (pers. comm.) also reared isobeon to maturity on poison ivy. Roy Kendall (pers. comm.) suggested that Croton (Goatweed) species would also suffice since he had previously reared isobeon through two instars on that genus. Croton was not immediately available, but Euphorbia dentata, a related plant, was readily accepted and survival to imago was 100% (N=4).

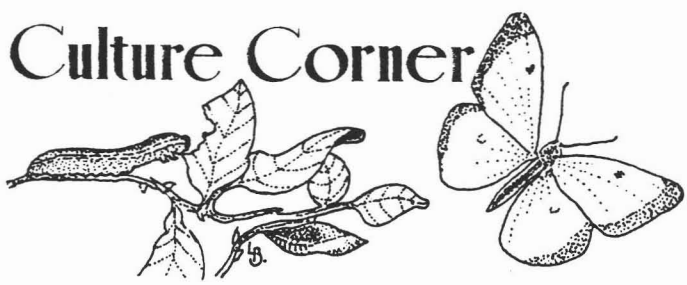
By early summer of 1981 it became apparent that C. isobeon would feed on nearly anything. Twenty-eight species of plants in sixteen families were readily eaten and larvae were brought to maturity on seven of these (see table). It was at this time that the possibility of detritus as a food source dawned on the author.

Larvae of C. isobeon were found to accept detritus in many forms. Dead leaves, either dry or moist, were eaten to various extents, the fresher and more obviously rotten, the more acceptable in terms of quantity consumed. Plants allowed to die and grow moldy in a terrarium proved to be a wonderful source of nourishment to larvae of all ages. In a terrarium environment the larvae never attempted to climb a stem of any green plant to seek food. All foraging was strictly ground-based. Dead insects, including katydids, grasshoppers, cockroaches, and vespid wasps were all eaten by one or more larvae. Even the follicles of hairs pulled from the author's beard were feasted upon!

As is the case with many other butterflies, Calycopis larvae do poorly in large terraria. Survival on any food source drops to very low levels under such conditions. It is therefore wise to separate larvae into ones, twos, or threes and keep them in small plastic cups such as catsup is served in. Caps are necessary to keep the caterpillars from wandering away. If fresh leaves are to be used, they should be replenished daily, but in the case of detritus, only moisture needs to be added to keep the larvae alive.

Because Calycopis isobeon does not diapause in many of its broods, because it is multivoltine, and because of the ease of obtaining eggs, this species may turn out to be a wonderful laboratory animal. Broods have been reared throughout the year, though the winter broods are slower, probably due to lower temperatures. Gifford and Opler (1983) report hibernation of cecrops in fall broods in coastal North Carolina. At optimum conditions, adults of isobeon can be obtained from eggs in 35 days.

Copulation between captive adults has not been successful, but wild adults have been observed in copulation at night (Kendall, pers. comm.) and proper laboratory conditions might facilitate it. It is also likely that a "synthetic" food could be developed to replace wild plants in areas that are sprayed regularly or where natural food is unavailable. It would be interesting to offer the larvae agar-based laboratory food such as Drosophila are reared on.



A few plants have been shown to be strangely inadequate even though the larvae have eaten them voraciously. The most striking case of this involves the leaves of Wisteria vines (Wisteria sinensis), which were fed upon vigorously and produced robust caterpillars which reached the ultimate instar very quickly. At that point, however, cannibalism took over, and among the four that survived only one pupated. This pupa was deformed and darker in color than any others, and failed to eclose.

Calycopis isobeon is also only the second lepidopterous insect known to survive on sorrel Oxalis dillenii, a plant which contains poisonous oxalic acid. [The other is Galgula partita, a noctuid moth. (Godfrey, 1981, Journ. Lep. Soc. 35:2, p. 132)]. Adults of isobeon from Oxalis are dwarfed.

The most reliable plants tested to date are Euphorbia dentata, Sonchus asper (Sow Thistle), Medicago polymoprha (clover), and rotten, molded plants and seeds.

ACCEPTABILITY OF FOOD PLANTS OFFERED TO *CALYCOPIS ISOBEON*

Family/species	Accepted *	Reared to Maturity	Rejected *
Graminae			
Panicum sp. (Millet: seeds, sprouts)	X		
Triticum sp. (wheat, bread crumbs)	X		
Cynodon dactylon (fresh leaves)			X
Juglandaceae			
Juglans sp. (fresh leaves)	X		
Carya sp. (fresh leaves)	X		
Fagaceae			
Quercus virginiana (fresh leaves)	X		
Quercus sp. "red oak" (dead leaves)	X		
Ulmaceae			
Celtis sp. (fresh and dead leaves)	X		
Amaranthaceae			
Amaranthus sp. (fresh leaves)	X		
Leguminosae			
Medicago polymorpha (fresh leaves, young fruit)		X	
Wisteria sinensis (fresh leaves)	X		
Cercis sp. (fresh leaves)	X		
Geraniaceae			
Geranium carolinianum (fresh leaves and fruit)		X	
Oxalidaceae			
Oxalis dillenii (fresh leaves, fruit)		X	
Euphorbaceae			
Euphorbia dentata (fresh leaves, fruit)		X	
Croton sp. (fresh leaves)	X		
Sapium sebiferum (fresh leaves)	X		
Anacardiaceae			
Rhus toxicodendron (fresh leaves)		X	
Malvaceae			
Malvastrum coromandelianum (fresh leaves)	X		
Umbeliferae			
Torilis arvensis (fresh leaves)		X	
Torilis nodosa (fresh leaves)	X		
Sapotaceae			
Bumelia lanuginosa (fresh leaves)	X		
Oleaceae			
Ligustrum sp. (dried berries)	X		
Convulvulaceae			
Ipomoea sp. (fresh leaves)	X		
Compositae			
Sonchus asper (fresh leaves, flowers, fruit)		X	
Sonchus oleraceae (fresh leaves, flowers, fruit)	X		
Cosmos sulphureus (petals, young seeds)	X		
Pyrrhopappus multicaulis (petals)	X		
Helianthus annuus (hulled seeds)	X		
Achilleae millefolium (fresh leaves)			X
Gnaphalium wrightii (fresh leaves)			X
Calyptocarpus vialis (fresh leaves, flowers)			X
Commelinaceae			
Commelina sp. (fresh leaves, flowers)			X
Liliaceae			
Smilax rotundifolia (fresh leaves)			X
Caryophylaceae			
Stellaria media (fresh leaves, flowers)			X
Aquifoliaceae			
Ilex sp. (fresh leaves)			X
Onagraceae			
Oenothera laciniata (fresh leaves)			X
Loganiaceae			
Polypremum procumbens (fresh leaves)			X
Labiateae			
Lamium amplexicaule (fresh leaves)			X

*A plant is defined herein as "rejected" if first instar larvae refuse to eat it when they are offered nothing else for 24 hours. "Acceptance" means that larvae of any age ate the plant readily and continued to eat it for several consecutive days. One plant (*Sonchus oleraceae*) was refused in the first instar but was eaten regularly by older larvae. It is listed as accepted.

Samuel A. Johnson
Acting Chairman, Dept. of Science
Columbia College, Chicago, Illinois

A SUGGESTION FOR CULTURING HERBIVOROUS CATERPILLARS

Mass culturing of caterpillars often constitutes a problem since large quantities of suitable hostplants are needed. Ideally, caterpillars are reared outdoors on hosts enclosed in cages or sleeving to prevent predation and wandering or indoors on potted plants. Such conditions present nutritious host foliage in a hygenic way. However, hosts often do not grow outdoors in forms or locations convenient for confined rearing. Additionally, few of us have access to sufficient greenhouse or artificially lighted space to grow host plants in appropriate quantities for our rearing programs. As a substitute, caterpillars are usually reared in closed containers on harvested host material, which is often inserted into florists' "Aquapics" to retain freshness (Scriber, 1977). This method can present problems of poor host quality, stressful humidity, overcrowding and frass buildup. Some species of caterpillars can survive such conditions remarkably well; however, others such as the umbellifer-feeding black swallowtail Papilio polyxenes are quite difficult to raise in large numbers under these conditions (Lederhouse, 1978). Polyhedrosis viruses and other pathogens are enzootic in many species and prove lethal when the caterpillars are stressed (Steinhaus, 1958; Burges, 1973).

I wish to suggest a second economic alternative for the culturing of herbivorous caterpillars which in several ways more closely mimics the ideal situation (i.e., intact hosts). First, a lid is prepared which will serve to support plant cuttings. The bottom portion of a large plastic petri dish will serve this purpose. This support is drilled to provide a grid of twelve to sixteen holes. In the case of P. polyxenes, holes of 3/16 inch diameter are sufficient to accommodate stalks of parsley (Petroselinum crispum), a common host. The lid is fitted to a wide-mouth jar filled with water. Stalks of host plant are then inserted into the support, thus creating an "artificial plant." Larvae may be placed on the preparation as if it were an ordinary potted host.

This method offers several advantages. The caterpillars stay out of contact with their frass, which falls away from the host leaves. There is no problem with accumulating condensation, as can be the case when closed plastic boxes are used. Also, fresh stems of host may be added continuously to replace those consumed; it is not necessary to dismantle the entire set-up. Therefore, the actual handling of the larvae is kept to a minimum. Finally, maintainence time is decreased since there are no boxes or "Aquapics" to wash daily.

This technique will serve as an effective substitute for the culturing of herbivorous caterpillars via intact foliage when for whatever reason that procedure cannot be followed. This is especially true for larvae that can be reared on cultivated vegatables or herbs available from supermarkets (e.g., parsley or collards). To date, I have raised several broods of P. polyxenes by this method on store-bought parsley and have experienced no difficulties. I am confident that it can be applied to other species, assuming, of course, that fresh cuttings are readily obtainable.

LITERATURE CITED:

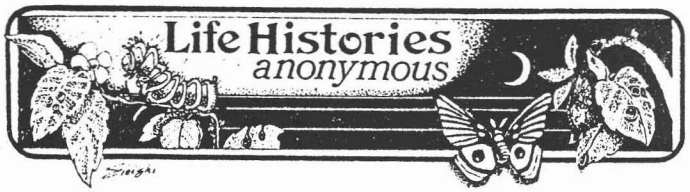
BURGES, H. D. 1973, Enzootic diseases of insects. Annals of the New York Academy of Sciences. 217:31-49.

LEDERHOUSE, R. C. 1978. Territorial behavor and reproductive ecology of the black swallowtail butterfly, Papilio polyxenes asterius Stoll. Ph.D. thesis, Cornell University, Ithaca, New York, xi + 155 pp.

SCRIBER, J. M. 1977. Limiting effects of low leaf-water content on the nitrogen utilization, energy budget and larval growth of Hyalophora cecropia (Lepidoptera: Saturniidae). Oecologia 28:269-287.

STEINHAUS, E. A. 1958. Crowding as a possible stress factor in insect disease. Ecology 39:503-514.

S. G. Codella, Jr.
Dept. of Zoology and Physiology
Rutgers Univ., Newark, N. J.



SATYRIUM EDWARDSII: SOME NOTES ON LIFE HISTORY AND INTER-SPECIFIC PAIRING

The lycaenid Satyrium edwardsii (Grote and Robinson) is known at present from three localities in the Toronto region. Two of them, just 4 km apart, support good-sized colonies, and, in favourable years, this hairstreak can become locally quite common. Both areas are ecologically similar to the localities reported by Webster and Nielsen [J. of Lepid. Soc. 38(2), 124-133, 1984]. In the open areas of the dry, sandy, oak woodland are such plants as Ceanothus americanus L., Lupinus perennis L., Vaccinium pallidum Ait., and Comptonia peregrina (L) Coult. In a linear relict prairie habitat at Lambton Mills in the west end of the city I observed in July of 1975 two ♀ S. edwardsii laying eggs on the saplings of Quercus velutina Lam. Most of the eggs were laid on old wounds and bark crevices. However, on this occasion, I did observe oviposition on the mature ♀ coccid-Kermes sp. These gall-like scale insects develop into firm, polished, spherical forms and are conspicuous on the oak twigs. The ♀ edwardsii tucked her eggs tightly into old emergence holes that had apparently cracked and expanded. They have produced many eggs for me these past few years. A few ova hatched in a very warm spell in mid-April of 1976 and the tiny larvae were fed on the swelling buds of Quercus alba L. They were later transferred to the unfolding leaves of Q. velutina Lam. and Q. rubra L. and reared to maturity in snap cap plastic vials. Pupation began as early as June 2, with the first emergence occurring on the 17th of the month. This was a week or so before normal emergence for this species in the field. Only three larvae were found feeding on the foliage. These appeared to be in the 2nd instar stage. One, collected on the underside of a small leaf on May 23, emerged as an adult on June 27.

At the Lambton Mills location I found a myrmecophilous relationship between the S. edwardii larvae and small (2.0 - 3.0 mm) brown to dark brown ants - Lasius alienus (Foerster) (det. by Dr. A. Francoeur, Université du Québec a Chicoutimi). This was the only ant species attending the larvae in June 1976, and in three subsequent years. Larval aggregations and ant structures of leaf litter and detritus were much smaller than those observed by the Michigan authors. Most of the larvae and pupae were found under dead oak leaves a few centimetres from the base of the black oak saplings. The largest number found under one sapling on June 23, 1984 consisted of 11 pupae and 3 larvae. Dozens of ants were running excitedly over this closely packed assemblage and a few were observed to be feeding on the dorsal honeydew gland of one of the larvae. Oftentimes, however, one to four or five larvae and/or pupae would be found scattered around the base of the saplings with few if any ants in close attendance.

In captivity, the larvae would, at times, move with surprising rapidity on leaves, stems and on the sides of the plastic vials. In contrast, before pupation, the larvae remain motionless for a lengthy time even when tended by introduced ants from the field. In the prepupal stage the larva contracts in length and takes on a rosy hue. The honeydew gland seems to be more noticeable at this time and the ants continue to feed on the liquid. The pupa changes in a few hours from a somewhat translucent white and pinkish-brown to a much darker and mottled yellowish-brown that perfectly matches the dead oak leaves on which it is attached with a silk girdle. I did not notice if the ants were of any protective value to the larvae. However, only three were parasitized. One appears to be an ichneumon but has not been positively identified. The other two parasitoids did not emerge as adults. These results might indicate a rather low rate of parasitism. The detailed observations and discussion of Webster and Nielsen concerning the interacting relationship with the ants, lycaenid larvae and the membracid Similia camelus (Fabricius) were most interesting and informative. Although I did not take note of the ants tending the nymphal membracids, I did find that the adults of this species of treehopper were common on black oak saplings in mid June. Further studies will indeed help to understand the complexities of this fascinating association of an insect community that seems to be dependent on each other for their survival.

Pupa of Satyrium edwardsii, Length 10 mm
June 23, 1984, Lambton Mills, Toronto, Ontario

In the May 1981 issue (340:9) of the Toronto Field Naturalist I reported an unusual pairing of two hairstreak species from the aforementioned Lambton Mills locality. Here, five species are sympatric from late June to early August.. Satyrium edwardsii and S. acadica (W.H. Edwards) are holding their own in numbers since the 1960s but the other three - Harkenclenus titus (Fabricius), Satyrium calanus (Hubner), and S. liparops (Leconte) appear to be in a decline. On July 6, 1978 at about 1415 h I noticed from a distance a mated pair of hairstreaks on a milkweed leaf. This wasn't so unusual as other pairs had been seen that day and on many occasions in past seasons. However, close examination revealed a remarkable event - a mated pair (S. edwardsii ♂ x S. acadica ♀). After a few anxious moments I was able to capture the pair. They remained in copula for over an hour in a large plastic vial. Unfortunately the ♀ acadica did not cooperate in laying eggs! The experience, however, was one I did not expect to observe and apparently this interspecific pairing of two distinct species is of rare occurence in the butterfly world.

William M.M. Edmonds
Toronto, Ontario, CANADA

MONARCH PUPA

Gold-trimmed jade pendant,
within you grows the tawny
soaring butterfly.
--Harriet Reinhard--

Metamorphosis

MAX RICHTER.....

Max Richter, loyal member of the Lepidopterist Society for over 30 years, passed away in the Catskill Hospital on March 18, 1984, at the good age of 100 years. He was born in Zeulenroda, in Germany on Oct. 5, 1883 and started collecting butterflies at the age of 9 when he helped his father in the woods catching birds and finding grubs for them. He left an extensive collection of butterflies in his home town for the benefit of the museum there when he immigrated to the United States in 1928, with his son Herbert. His wife Anna and daughters Elfriede and Helen followed in '29. He worked as a tool and die maker in Newark, N. J. until he bought a farm in the Catskills in 1932 which he named the Butterfly Farm and invited guests to come and visit. For many years Max, Anna and Helen were in the resort business along with an extensive garden and farm animals, while Max kept up his hobby of collecting butterflies.

In 1953 Max opened a butterfly museum for the public on his Farm in East Durham, where he exhibited many of his collected species, and also shell collections of his daughter. He made souvenirs of some of the species and so had a little business going when his daughter and son-in-law took over the boarding house, in '61. The loss of his son in '63, his son-in-law in '75 and his wife of 92 with whom he celebrated his 73rd wedding anniversary, in '79 left him alone with his daughter Helen on the farm. In '83 he was feted by many organizations for his having completed his 100th birthday. It was a great year for him, as he also took a trip that spring to see his grandson Robert Clausing and family in California.

His daughter Helen is now endeavoring to keep the museum open to the public for a while in the summers. Max was also cofounder of the Regional Entomology Club of Albany, N. Y., which is still meeting once a month in the Museum of Natural History in Albany. Many members are also members of the Lepidopterists' Society. His motto was: Study nature and its wonders and you will live to a ripe old age.

Sincerely submitted by his daughter
Helen Kruppenbacher

*****

HAROLD LAVERNE KING.....

Mr. Harold LaVerne King passed away on 27 January 1985 at his home in Sarasota following an extended illness. A charter member of The Lepidopterists' Society and a Research Associate of the Florida State Collection of Arthropods since 1969, "Verne" collected Lepidoptera as an avocation much of his lifetime with a special interest in Lycaenidae. He made a significant contribution to our knowledge of the Lepidoptera of Florida, other parts of the United States, and especially of Mexico and Central America. His large, neatly prepared, accurately identified collection, which included some very rarely collected Neotropical species, had been deposited in the FSCA prior to his death at the age of 85.. Mr. King was a commercial artist and for many years owned and operated King Of Sarasota Advertising Service, which involved a billboard business throughout much of Florida and southern Georgia. He is survived by his wife, Suejette, and 3 children by an earlier marriage: Mrs. Carolyn Clough, Jr., Mrs. Polly Ann King, and Mr. William C. King.

Information furnished by Howard V. Weems, Jr.

*****

CHARLES G. MERKER.....

Word has been received of the Sept. 10. 1984 death of C. G. Merker of Wexford, Pennsylvania. He was a charter member of the Society and enjoyed it until his death.

*****

MASATARO AKAI.....

Masataro Akai of Mitaka, Japan, who was a member since 1972, passed away in July 1984, following a sudden heart attack.

*****

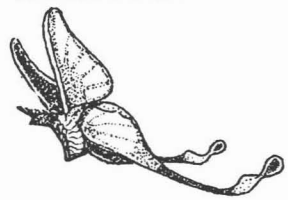
DR. TARSICIO ESCALANTE PLANCANTE.....

Notification has been received of the death on January 1, 1985 of Dr. Tarsicio Escalante Plancante in Mexico City. He had been a member since 1952.

*****

HOWARD E. WAS.....

Word has been received of the death of Howard E. Was of Brookfield, Wisconsin sometime in late 1983.



MYSTERIES OF LEPIDOPTERAL MIGRATION

Migration of lepidoptera is not a new phenomenon to many field lepidopterists, but this event is still poorly understood and seldom reported. C. B. Williams in his classic book, "The Migration of Butterflies" (1930, London), documents evidence of butterfly migrations worldwide. He also briefly discusses the migrations of a few moths, which are much less known than those of butterflies. Little significant information has surfaced in the Great Lakes region about lepidoptera migration, except for the fall flights of the popular Monarch, Danaus plexippus (L.), along shorelines. Several interesting and unique accounts of lepidoptera apparently migrating over water or along the shores of the Great Lakes, or appearing farther north than known habitat, have been observed in Michigan by this author, along with other lepidopterists. These have not been reported in scientific publications. These accounts seem significant and are outlined to alert other lepidopterists and zoologists, and to further promote discussion on this phenomenon. The following events have been observed by the author; others have also shared their observations and data with me:

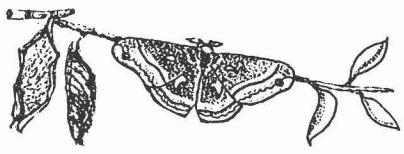
1. On 24 August 1954, while trolling for lake trout in Lake Superior about a mile off the coast of the Keweenaw Peninsula from Copper Harbor to Keweenaw Point, I observed a number of large noctuid moths flying southward toward the peninsula. The moths were flying swiftly from one to three feet above the white-capped waves in a typical noctuid manner; this flight occurred from 8:15 to 8:50 AM, EST, and I counted 37 moths during the period. Unfortunately, one usually does not carry a butterfly net while fishing, nor was any attempt made to capture this fast flying moth. All the moths appeared to be of the same species and were light gray and of the size of a large Noctuinae, e.g. resembling Eurois occulta (L.). This species was common at bait at Copper Harbor during this time. The nearest landmass to the north was approximately 60 miles over the lake. The question arises: do noctuids fly long distances over large bodies of water during the day?

2. In Marquette County, the morning of 9 September 1963, I found many water-worn noctuids along the lower beach of Lake Superior. Many moths were still alive and clinging to various driftwood and other debris along the beach. Most of the moths were Alabama agrillacea (Hbn.), plus one Autographa sp., a few other unknown noctuids plus several "ladybird beetles". The temperature for the previous three to four days was in the upper 80's with strong S to SW winds. During the night, a sudden storm produced heavy rain which apparently had forced these insects into the lake and tossed them upon the beach.
3. In Van Buren County, the morning of 3 September 1969, I found hundreds of noctuids, representing several species, washed up on the upper beach on Lake Michigan near South Haven. I counted at least one moth per inch over a 10-foot section, located about one-quarter mile north of the mouth of the Black River. Moths covered the beach as far as I could see in either direction. Included were Pseudaletia unipuncta (Haw.), Plathypena scabra (F.), Agrotis ipsilon (Hufn.), Zale sp., and other unknown species, many of which were battered and descaled from being in the water. This observation also followed a rapid change in the weather the night before, along with heavy rain.
4. In Berrien County, on 22 July 1978, Bill Taft, Jr. observed "hundred's" of live Catocala on sand dunes under sunny skies along Lake Michigan. Many of the underwings appeared to be C. palaeogama Gn. resting on various small trees and shrubs, and hiding under wooden stairs leading to the beach. The moths nervously took flight when Bill walked near vegetation and down the stairs. During the evening a violent storm struck the area with heavy rain and a sharp drop in temperature. The following morning, Taft found the upper beach littered with an undetermined number of Catocala wings, representing several species. Apparently, sandpipers and other shore birds had consumed the bodies, and left the wings. He retrieved an assortment of wings which included C. palaeogama, nebulosa Edw., subnata Grt. Were these moths flying over the lake when the storm overtook them?
5. John Perona, resident of Calumet, Houghton County (located about 5 miles from Lake Superior), has been collecting insects, especially butterflies and moths of the Keweenaw Peninsula for about 40 years. During this time, he has assembled an amazing collection of local and unique stray species--many of which are new state records. It was the surprising number of southern species that caught my attention a few years ago. Some of the Austral and more southern species collected in and near Calumet include the following:
   a. Battus philenor (L.)- 22 July 1975 and 15 July 1977, Keweenaw Co. One of each sex collected in an alfalfa field;
   b. Atalopedes campestris (Bdv.)- 15, 29 September 1970, 1971, Houghton Co. Two fresh females collected near Calumet;
   c. Aellopos titan (Cram.)- 10 July 1977, 26, 27 August 1983, 12 September 1971, Houghton, Keweenaw counties. Four specimens were collected nectaring on alfalfa, and others were observed over a 14 year period;
   d. Hypocala andremona (Cram.)- 31 August 1975, one specimen collected in downtown Calumet on a storefront;
   e. Ascalapha odorata (L.)- 29 August 1973, one specimen collected in downtown Calumet on a storefront.

   I wonder if this is more than a coincidence that these southern species have been collected hundreds of miles north of their known habitat. It is very unlikely that any of these species breed in the Calumet area. Do any of these species normally migrate this far north? Is it possible that these species are brought to this area by strong southern winds, or that some are funneled along the Keweenaw Peninsula with the help of lake breezes or other heretofore unknown forces?

The above observations and data are presented in the hope that others may be interested in further researching this phenomenon, and perhaps have some rational explanations for these events. Can migrations of these species be forecast? Collectors are urged to make special efforts to visit the Great Lakes shorelines, including the Keweenaw Peninsula, prior to and after sudden weather changes during the collecting season. I would appreciate hearing from anyone with similar experiences, or with comments on this phenomenon.

Mogens C. Nielsen
Lansing, Michigan



COMMON NAMES

I recently received my new issue of the Journal of Research on the Lepidoptera Vol. 22:2. It contained an article by Dennis Murphy and Paul Ehrlich against the use of common names for butterflies. They want the use of common names to come to a STOP. They "knocked" the Lepid. Soc. for forming a committee to standardize the use of common names. Murphy and Ehrlich were given 5 pages of precious space in this far behind schedule publication to express their view. Obviously, the space given implies that the publisher regarded the subject matter as important as did the authors.

Personally I found the article incredibly naive, self-incriminating and making a mountain out of a mole hill! Thus I also found it a waste of space in a journal that I support through my subscription, and a waste of my money. It is naive because there is no way that any person or group of persons are going to be able to put a stop to the use of "common" names, especially by "common" people. These learned men must have missed the fact that the vast majority of people in the world are not Lepidopterists. And further the majority of Lepidopterists are not "professionals". Common people name things. When naming things these common people naturally give common names to the things which they name. The inhabitants of any area have the right to name the plants and animals of their area any common name they want. My 73 year old mother has no knowledge of Pieris rapae but she certainly has been familiar for many years with the "small white" butterfly whose caterpillars eat her cabbage plants. Likewise she does not know what a Danaus plexippus is but she knows a monarch when she sees one!

Murphy and Ehrlich dislike the practice of publishers of "popular" butterfly books of wanting common names listed for each species. Personally I'm glad that at 8 years of age when my father bought me a copy of A. B. Klots butterfly book that it had common names in it. After 30 years of collecting and having even described one new subspecies myself, I still like to use common names. Then there is the self-incriminating aspect of their article. In one breath the authors say; "... lepidopterists should use latinized names-exclusively!". Yet throughout their article Murphy and Ehrlich repeatedly use common names themselves as "swallowtail" and "butterfly" rather than "Papilionidae" or "Rhopalocera". The publishers also had the nerve to plaster all over the cover of vol. 22:2 nine reproductions of Australian postage stamps depicting Australian

"butterflies" using their COMMON NAMES, and then waste 5 whole pages of valuable text to criticise the use of common names! Common names are totally unscientific, we all know that. So what's the big deal, let us have a little fun! There are some Lepidopterists who need to rediscover "How to Know the Butterflies". In 1961 Ehrlich authored a book by that name containing many citations of common names. The late Richard B. Dominick once told me "Ron, if I ever get to the place where I no longer enjoy catching and looking at a luna kick me in the butt!" Dick was saying that collecting should be fun. I'm glad there are grass, sky, birds, trees, moths, butterflies, monarchs, swallowtails, etc. because nature is fun.

In the quest for scientific purity through pragmatic dogma I fear that the human race will castrate the artistic, creative human soul. For man is not only an objective creature which sees a Cercyonis pegala but an esthetic creature which sees a blue eyed satyr. Man is not a machine, or a test tube. Man is a poet who says that a rose by any other name is still a rose, and that beauty is in the eye of the beholder. There is romance in the butterfly enthusiast's heart as he compasses the world in pursuit of those gossamer winged jewels of the day. Man's mind will objectively name the creature a Cercyonis pegala but his heart will forever call it the blue eyed satyr.

As an ordained minister I deal everyday with human beings on the philosophical and psychological level. I suggest that Murphy and Ehrlich retake some basic courses on human psychology as they not only need to rediscover the "butterflies" but also something of human expression. Very directly their attack of those individuals, professional or amateur, who like to use common names for lepidoptera is really an attack on human expression. No one I know of has ever tried to imply that there was anything scientific about common names at all! It is a creative pastime of butterfly nuts just as fishermen like to spin yarns. Thus I also suggest that in the future the Journal of Research on the Lepidoptera sticks to "research" on Lepidoptera. I'm sure they have enough "scientific" material submitted to them to publish.

Ron Gatrelle
Goose Creek, S.C.

Forthcoming Meetings

URBANA-CHAMPAIGN 1985
36TH ANNUAL MEETING INFORMATION UPDATE

Door Prizes! Door Prizes! Door Prizes! Once again we hope that Charlie Covell will present his enthralling magic act and give out sundry treasures (specimens, publications, insect pins, collecting nets, etc.) to a spellbound audience. This year's drawing performance will be at the banquet for the 36th annual meeting of the Lepidopterists' Society, 18-21 July, 1985, University of Illinois, Urbana-Champaign, Illinois. Plan to attend! Contributed door prizes for this event are being solicited. If you wish to donate any items to the Society for the drawing, please send them or bring them to the meeting.

Please refer to the 1985, Jan/Feb (pg 11) and Mar/Apr (pg 35) issues of the NEWS for general information about the meeting.

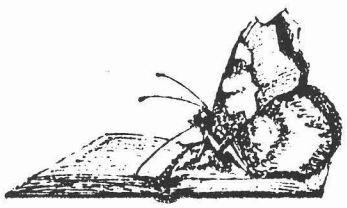
If you did not receive a registration packet and are interested in attending the meeting, or wish to contribute a door prize, please write or send the contribution to George L. Godfrey, Illinois Natural History Survey, 607 E. Peabody, Champaign, Illinois 61820, or phone 217 333-6846.

1985 XERCES SOCIETY MEETING

The Entomology Division of the Peabody Museum of Natural History at Yale University is host from June 5 to 9 for the 1985 Xerces Society Meeting. For information on program and costs, contact Charles L. Remington, Dept. of Biology, Yale University, New Haven, Connecticut 06520.

32nd ANNUAL PACIFIC SLOPE MEETING

Camp Norris, Barton Flats, El 7000' in the San Bernardino Mtns will be the site of the June 14-16 Pacific Slope meeting. Cost is only $50 per person which includes registration, all meals, lodging, etc., etc. For information and future announcements contact the Meeting chairman, Julian P. Donahue, Natural History Museum, 900 Exposition Blvd, Los Angeles, California 90007 or phone 213 744-3364 Tuesday through Saturday.



Books

BOOK REVIEWS

The Life Histories of the Butterflies of Japan, by H. Fukada, E. Hama, T. Kuzuya, A. Takahashi, M. Takahashi, B. Tanaka, H. Tanaka, M. Wakabayashi, & Y. Watanabe, Vol. 4, XXII, 373 p. with 64 color plates, Hoikusha Pub. Co., 17-13, 1-chome, Uemachi, Higashi-ku, Osaka 540, Japan, 1984.

This fourth and last volume covers the Satyridae and Hesperiidae, in the same format as in the previous volumes (see NEWS #1, 1984, p. 9 and #1, 1985, p. 8. The color photographs, while less spectacular (because of the species involved) than those for the preceding families, do a particularly good job of depicting the larval feeding and resting postures, feeding damage, and larval shelters. There is as yet no U.S. production to equal it, the excellence of Opler's book notwithstanding. English summaries for each species are followed by distribution maps, plus a latin-name index for the entire four-volume work. The price of ¥5000 is approximately $21 for this volume, and about $80 for the set.

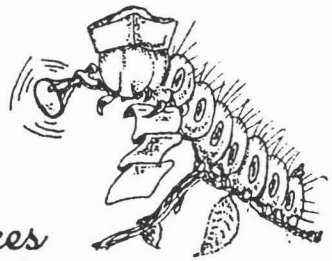
Dave Winter

FAUNA ALICANTINA IV: LEPIDOPTEROS ROPALOCEROS by J. H. Robert, A Escarré, T. García y P. Martínez. Published by the Instituto de Estudios Alicantinos, 1983 and printed in Suc. de Such Serra, Sdad Coop Ltda., Avenida de Orihuela, 51, Alicante Spain. This is no. 20, Series II of the notebooks of the Fauna of Alicante. No price given. This is a soft cover, 8½" x 11" volume containing 422 pages plus a Bibliography and Butterfly index. There are 25 color plates and 174 black and white pages of distribution maps, frequency charts and flight calendars, plus 27 pages of black and white food plant photos and 15 butterfly/food plant tables. Text in Spanish. This is a very comprehensive volume, using latin nomenclature, of the butterflies of Alicante Province in Spain giving data on food plants, flight periods, individual, seasonal and sexual variations, habitats and distribution within the Province and elsewhere. The color plates of the butterflies are excellent with both dorsal and ventral views often shown and frequently also both sexes. The distribution maps and other charts and diagrams are clear and easy to read with only a minimal knowledge of Spanish. The section on food plants is also easily used with little knowledge of Spanish. It is a volume worth having for anyone interested in European butterflies.

June D. Preston

BOOKS AVAILABLE

THE AUDUBON SOCIETY HANDBOOK FOR BUTTERFLY WATCHERS, published by Charles Scribner's Sons in 1984, covers all aspects of finding, watching, photographing, gardening and enjoying butterflies. This 274-page clothbound book was written by Bob Pyle and beautifully illustrated by Sally Hughes. Price $17.95. May be ordered at most bookstores without additional charge.



FEDERAL NOTICE OF REVIEW

On May 22, 1984 the Fish and Wildlife Service published a Notice of Review on North American Invertebrate animals, including Lepidoptra. The purpose of this notice is to clarify what species are considered as candidates for eventual listing and protection.

There are 6 categories included in the list: 1. High Priority candidate for listing--4 taxa (Hesperia leonardus montana, Euphydryas editha bayensis, Boloria acrocnema, and Euproserpinus weisti); 2. A possible candidate for listing but more data required--47 taxa; 2*. A possible candidate but probably extinct, discovery of new populations would probably lead to listing--12 taxa; 3A. Almost certainly extinct--30 taxa; 3B. Extirpated in North America but found in other countries--1 taxa; 3C. Previously considered as candidates on proposals or notices of review but no longer considered as a candidate because of new data or advice provided--20 taxa. Categories 2 thru 3C are listed below.

3A Argyresthia castaneela
2 Heterocrossa viridis
3A Coleophora leucochrysella
2 Fletcherana ioxantha
3A Scotorythra megalophylla
3A Scotorythra nesiotes
3A Scotorythra paratactis
3A Tritocleis microphylla
2 Petrochroa neckerensis
2 Hesperia dacotae
2 Panoquina panoquinoides errans
2 Problema bulenta
2 Pseudocopaeodes eunus eunus
2 Eumaeus atala florida
2 Euphilotes battoides comstocki
2 Euphilotes langstoni langstoni
2 Euphilotes rita mattonii
3A Glaucopsyche xerces
2 Hemiargus thomasi bethune-bakeri
2 Icaricia icarioides moroensis
3A Icaricia icarioides pheres
3C Incisalia lanoraieensis
3C Incisalia mossi windi
3C Incisalia mossi doudoroffi
2 Lycaeides melissa samuelis
3C Lycaena arota nubila
2 Lycaena dorcas claytoni
2 Lycaena hermes
3C Mitoura hesseli
2 Philotiella speciosa bohartorum
2 Plebulina emigdionis
2 Strymon acis bartrami
3C Vaga blackburni
3C Megathymus coloradensis kendalli
2 Stallingsia maculosus
3A Ectodemia castaneae
3A Ectodemia phleophaga
2 Acronicta albarufa
3A Agrotis crinigera
3A Agrotis fasciata
3A Agrotis kerri
3A Agrotis laysanensis
3A Agrotis procellaris
2 Catocala marmorata
2 Catocala pretiosa
2 Erythroecia hebardi
3A Helicoverpa confusa
3A Helicoverpa minuta
3A Hypena laysanensis
3A Hypena newelli
3A Hypena plagiota
3A Hypena senicula
2 Lithophane lemmeri
2 Pyreferra ceromatica
2 Anaea floridalis
3C Cercyonis meadii alamosa
3A Cercyonis sthenele sthenele
2 Euphydryas editha monoensis
3C Euphydryas editha wrigthti
3C Limenitis archippus obsoletus
3C Neonympha (=Euptychia) mitchelli
3C Oeneis chryxus valerata
2 Phyciodes batesi
3C Poladryas minuta
2 Satyrodes eurydice fumosa
3C Speyeria adiaste adiaste
3A Speyeria adiaste atossa
3C Speyeria adiaste clemencei
2 Speyeria callipe callipe
3C Speyeria egleis tehachapina
2* Speyeria hydaspe conquista
2 Speyeria idalia
3C Speyeria nokomis apacheana
2 Speyeria nokomis caerulescens
3B Speyeria nokomis nigrocaerulea
3C Speyeria nokomis nitocris
2 Speyeria nokomis nokomis
2 Speyeria zerene behrensii
2 Speyeria zerene myrtleae
2 Eucosma hennei
2 Grapholita edwardsiana
3A Parnassius clodius strohbeeni
2 Carolella busckana
3C Anthocharis cethura catalina
2 Euchloe hyantis andrewsi
3C Eurema dina helios
2* Hedylepta anastrepta
2 Hedylepta anastreptoides
2* Hedylepta asaphombra
3A Hedylepta epicentra
2* Hedylepta euryprora
2* Hedylepta fullawayi
2* Hedylepta giffardi
2* Hedylepta iridias
3A Hedylepta layanensis
2* Hedylepta meyricki
2* Hedylepta monogona
2* Hedylepta musicola
2* Hedylepta pritchardii
3A Hedylepta telegrapha
2 Margaronia cyanomichla
2 Margaronia exaula
2 Oeoblia dryadopa
2* Synanthedon castaneae
3A Manduca blackburni
3A Tinostoma smaragditis
3A Tischeria perplexa
2 Spheterista oheoheana
2 Spheterista pterotropiana
2 Spheterista reynoldsiana

Society members are encouraged to provide specific information or opinions to the Fish and Wildlife Service. Letters or requests should be addressed to the Office of

(continued on next page)

Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240 or one of six regional offices--Regional Director (Endangered Species)/Suite 1692, Lloyd 500 Building, 500 NE Multnomah St., Portland, OR 97232 (CA, HI, ID, NV, OR, WA, Trust Territories); P.O. Box 1306, Albuquerque, NM 87103 (AZ, NM, OK, TX); Federal Building, Fort Snelling, Twin Cities, MN 55111 (IL, IN, IA, MN, MI, MO, OH, WI); Richard B. Federal Bldg., 75 Spring Street, S.W., Atlanta, GA 30303 (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, PR, Virgin Isl.); Suite 700, One Gateway Center, Newton Corner, MA 02158 (CT, DL, DC, ME, MD, MA, NH, NJ, NY, PA, RI, VT, VA, WV); and P.O. Box 25486, Denver Federal Center, Denver, CO 80225 (CO, KS, MT, NE, ND, SD, UT, WY).

This list will be added to or modified over the next few years. Information which adds or deletes species or changes the category of consideration is sought in particular.

1985 ELECTION RESULTS

Members cast a total of 493 ballots in the Society's 1985 election, representing a return of 33% prior to the deadline on 15 January 1985 (compared with a 40% return of 607 ballots in 1984). The results are tabulated below, with the successful candidates indicated by an asterisk (*): all assume office on 21 July 1985 at the Annual Meeting in Urbana, Illinois, except for the Secretary, whose new term will begin on 1 January 1986.

The Society extends its sincere thanks to all candidates for their willingness to serve the Society.

PRESIDENT ELECT:	
*Clifford D. Ferris	409
abstain	84
VICE PRESIDENTS (3):	
*Jerry A. Powell (U.S.A.)	409
*Allan Watson (England)	351
*Edward M. (Ted) Pike (Canada)	311
S.N.A. Jacobs (England)	254
EXECUTIVE COUNCIL MEMBERS-AT-LARGE (3):	
*Edward C. Knudson	369
*Frederick W. Stehr	351
*Mirna M. Casagrande	307
Donald J. Harvey	271
SECRETARY:	
*Julian P. Donahue	452
abstentions	41
HONORARY LIFE MEMBERSHIP ELECTION	
J.F. Gates Clarke (80% required):	
*Yes	465 (94%)
No	3
abstain	25
KARL JORDAN MEDAL REPRESENTATIVE:	
*Theodore D. Sargent	425
abstain	68
CONSTITUTIONAL AMENDMENT (remove limitation on number of terms the Secretary may serve) (66-2/3% required):	
*Yes	384 (78%)
No	76
abstain	33

NOTES:

1. Some members mistakenly thought that Ted Sargent had been nominated for the Karl Jordan Medal. The Karl Jordan Medal Committee, which selects each year's awardee (if any), consists of three people: a representative designated by the Allyn Museum of Entomology, the President of the Society, and a representative elected by the Members of the Society. Dr. Sargent is this year's elected representative on the Committee.

2. The Secretary wholeheartedly agrees with the several members who, believing that 9 years as Secretary is enough, voted against his re-election and the constitutional amendment that would make possible his fourth term of office (his third 3-year term expires at the end of 1985). However, in the absence of a willing candidate to succeed him, he offered to serve for another term of office or until a replacement could be found.

Although Donahue was overwhelmingly re-elected (92% of the vote), the measure to amend the Constitution to permit a fourth term of office was flawed by three technical errors and oversights: (1) the amendment originally proposed by the Executive Council included removing the three-term limit from the office of Treasurer in addition to that of the Secretary; (2) the proposed amendment was not published in one of the Society's periodicals at least three months prior to the election (Const. Art. XII, Sec. 1); and (3) the ballot erroneously listed the measure as an amendment to the By-Laws instead of the Constitution. A proper notice in the NEWS and a new ballot measure next November will rectify these errors.

In the meantime, members interested in being Secretary of the Society are encouraged to step forward (perhaps among those who voted against me there is one who would like to volunteer or suggest some serious alternatives!). I will be most pleased to discuss the secretarial responsibilities with any potential candidates, and encourage them to contact me at the earliest possible moment. My telephone number is (213) 744-3364, Tuesday through Saturday.

Julian P. Donahue
March, 1985

OFFICERS OF THE SOCIETY ARE NOW AS FOLLOWS:

Through 21 July 1985	
President	Don R. Davis
President-Elect	Clifford D. Ferris
Immediate Past President	Lee D. Miller
Vice Presidents (3)	Vitor O. Becker
	Javier de la Maza
	John C. Downey
Secretary	Julian P. Donahue
Treasurer	Eric H. Metzler

After 21 July 1985	
President	Clifford D. Ferris
Immediate Past President	Don R. Davis
Vice Presidents (3)	Edward M. (Ted) Pike
	Jerry A. Powell
	Allan Watson
Secretary	Julian P. Donahue
Treasurer	Eric H. Metzler

EXECUTIVE COUNCIL MEMBERS-AT-LARGE:
(term expires at annual meeting in year indicated)

1985	1987
Frances S. Chew	Boyce A. Drummond III
Gloria J. Harjes	John Lane
Timothy P. Friedlander	Robert K. Robbins
1986	**1988**
John M. Burns	(assume office 21 July 1985)
Floyd W. Preston	Mirna M. Casagrande
Nancy E. Stamp	Edward C. Knudson
	Frederick W. Stehr

EDITORIAL COMMITTEE:

JOURNAL Editor:	Thomas D. Eichlin
NEWS Editor:	June D. Preston
MEMOIRS Editor:	Charles V. Covell, Jr.

JOURNAL UPDATE

Vol 38, No 3 of the JOURNAL of the Lepidopterists' Society should be in the mail shortly.

Research Notices

● We are actively gathering data and making preliminary outlines for an upcoming book on the biology of the giant silk moths (Saturniidae) of the United States and Canada. The adults and last instar larvae of all the species will be illustrated in color; including the six species described and/or collected since the publication of M.O.N.A. We are soliciting field observations of unreported natural larval foodplants, ecologically adaptive behavior (including mating activity), and range extension information. All published contributions will be gratefully acknowledged. A special request for the upcoming collecting season includes livestock of the various Coloradia species. In addition, color photographs of last instar Agapema solita larvae are being sought. Please contact: Paul Tuskes, 7900 Cambridge #141-G, Houston, Texas, 77054; or Jim Tuttle, 728 Coachman #4, Troy, Michigan, 48083, telephone (313)689-6687.

● NEOTROPICAL DALCERIDAE WANTED for revision of this small, uncommon family related to Limacodidae. Immatures especially wanted. Will borrow, buy, or trade; Please write before sending specimens. Scott Miller, c/o Entomology, NHB 127, Smithsonian Inst'n, Washington, DC 20560, USA.

● WANTED: Specimens of male and (esp.) female Parnassiinae for research project on reproductive biology and sphragus formation in this group. Require full data; desire specimens of all conditions (fresh to worn). Will pay postage and provide Colorado specimens in exchange if desired. Dr. Boyce A. Drummond, Pikes Peak Research Station, Colorado Outdoor Education Center, Florissant, Colorado 80816; phone 303-689-2025.

From The Editor's Desk

June Preston

It is April and for a change I think spring and butterflies and moths will be arriving early in Kansas, and I have only one more issue of the NEWS to get ready for the printer before mid-May when my husband and I will be heading off in our truck-camper on a 3 month butterfly collecting vacation. We are looking forward to seeing many of you at the Pacific Slope meeting and/or The Annual Meeting in Champaign-Urbana, and we will hope to bring home a good supply of butterflies for our collection. I hope that everyone will have a good collecting year in 1985.

I have finally reached the bottom of the pile of letters on my desk, but not of material for the NEWS. I am thankful for all the interesting articles, photos and letters that have crossed my desk since I took on the job of Editor and I hope that you will continue to send me material for the NEWS.

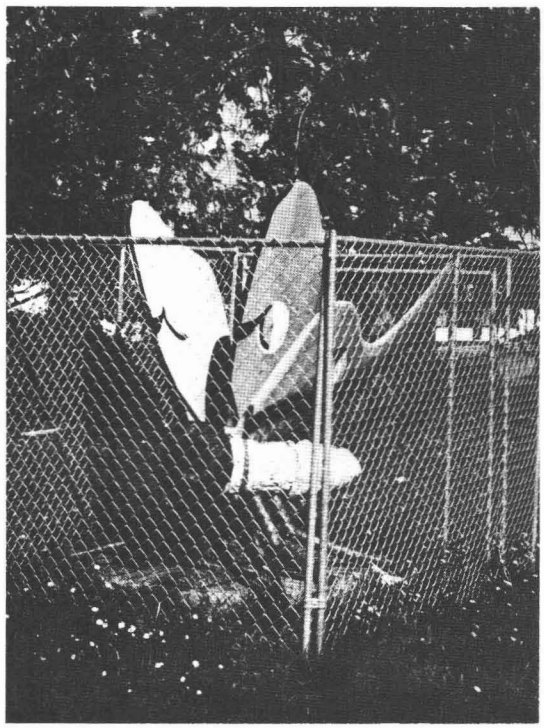
Dear Mrs. Preston:

I was saddened to read the commentry in the last issue of the Lepidopterists News by George T. Austin. What really set me thinking was not only Mr. Austin's argument for Scientific names against common ones, (the Latin vs English debate continues), but more importantly the elitist attitude is what really depresses me. In England and most of Europe, there are a wealth of dedicated amateurs who observe life histories, habits, etc. and the knowledge of the fauna in that area is far richer because of them. In North America, not only do schools teach rubbish when referring to insects, the only good insects are insects that kill other insects! But also, we have Ivory Tower Lepidopterists who spend their time dissecting genitalia and wondering whether new species have been discovered without caring anything about life history. It is exactly the masses that Mr. Austin demeans that will give the infusion of observations that we need. My views are obviously my own, however, several Lep. Soc. Members that I have spoken with apparently agree.

Sincerely, Chris Young

A. luna !

The picture of this replica of a luna moth was taken by Tom Taylor while travelling near Bar Harbor, Maine in the Fall of 1982. Some one went to a lot of work to make it as it stands 4 or 5 ft. high. Why the chain link fence? Perhaps they thought it would fly away!



New Members

ALBU, VALERIU (M.D.): 4539 Hannaford, Dayton, OH 45439, USA.

APPLEGATE, J. M.: 4400 - 4th Street South, St. Petersburg, FL 33705, USA.

ARGUELLO, MARY JANE: 11675 S.W. 13th, Beaverton, OR 97005, USA.

ARON, TIM: 7129 Heatherton Trail, Edina, MN 55435, USA.

BRANSKY, STEVEN C.: 1528 Parkside Drive, Park Ridge, IL 60068, USA.

BROKAW, JEFFREY J.: Bell Museum of Natural History, University of Minnesota, 10 Church Street S.E., Minneapolis, MN 55455, USA.

CARRASCO GONZALEZ, MANUEL: Bda. Andalucia, Blque. 5, 5C, San Lucar de Barraneda, "Cadiz," SPAIN.

CRANE, MICHAEL: 5298 North Turret Way, Boise, ID 83703, USA.

DONLY, HAL: 1984 Foxcroft Ave., Mississauga, Ontario L5J 2J4, CANADA.
FARRELL, CLIVE P.: Ryewater Nursery, Folke, North Sherborne, Dorset DT9 5PL, ENGLAND.
GUCCIONE, GREG: 1614 East Cherokee, Springfield, MO 65804, USA.
HARVEY, DONALD J.: Dept. of Zoology, University of Texas at Austin, Austin, TX 78712-1064, USA.
JACOBSON, NANCY L.: Dept. of Zoology, University of Texas at Austin, Austin, TX 78712-1064, USA.
LORQUIN, PATRICK: 45 - Bd. Delfino, 06300 Nice, FRANCE.
LOZYNSKY, A. (Dr.): St. Anthony's S.S., P.B. 9156, Masvingo, ZIMBABWE.
LUY, UDO: Weipelsdorfer Strasse 21, 8609 Bischberg, WEST GERMANY.
MARTINEZ R., JOSE I.: Apartado Aereo 3805, Cali, Valle, COLOMBIA.
MEYER, RICHARD P. (Ph.D.): University of California, Berkeley, Arbovirus Field Station, P.O. Box 1564, Bakersfield, CA 93302, USA; work phone (805) 322-2977.
MITCHELL, GARY L.: 7 Broad St., Apt. 1, Lynn, MA 01902, USA.
MONARCH PROJECT, THE: 10 Southwest Ash St., Portland, OR 97204, USA.
MYERS, GREGORY V.: 2101 New Jersey, Joplin, MO 64801, USA.
PERSKY, BARRY (Dr.): 103--18 Ave. M, Brooklyn, NY 11236, USA.
PLAUK, JEAN JERGEN: Kiebitzstrasse 14, D-2805 Stuhr 1, WEST GERMANY.
PRONIEWYCH, BOB: 531 Decatur St., Uniondale, NY 11553, USA.
ROSE, SHARON: P.O. Box 364, Belgrade, MT 59714, USA.
RUNNER, MARVIN H. (Dr.): P.O. Box 608, Boalsburg, PA 16827, USA.
SANCHEZ-CONDE, ANTONIO: 115 Albert Drive, Florissant, MO 63031, USA.
SIEGEL, STEVEN (M.D., Ph.D): 1185 - 71st St., Miami Beach, FL 33141, USA.
SMITH, RUSSELL L.: 5503 Dorothy Drive, San Diego, CA 92115, USA.
STEEN, JIM A.: 13632 Paysen Drive, Westminster, CA 92683, USA.
STENGEL, J. W.: 1836 Rhododendron Drive, Livermore, CA 94550, USA.
STEVENSON, H. G.: 720 Riverview Terrace, Annapolis, MD 21401, USA.
UBERTO, NARDELLI: Via Cosma e Damiano 9/2, 38100 Vela-Trento, ITALY.
VENABLES, B. ADRIENNE B.: 8308 Eastridge Ave., Apt. E, Takoma Park, MD 20912, USA.
WALDREP, RICHARD L.: 2384 Nutmeg Terrace, Baltimore, MD 21209, USA.
WELLS, GRAHAM: 23 Barrakee St., Marsden, Brisbane, Queensland 4203, AUSTRALIA.
WHITFIELD, JAMES B.: Dept. of Entomological Sciences, 201 Wellman Hall, University of California, Berkeley, CA 94720, USA.
WORMINGTON, ALAN: R.R. #1, Leamington, Ontario N8H 3V4, CANADA.
ZAMBRANO, STEVEN: 408 Diablo Creek Place, Clayton, CA 94517, USA.

Address Changes

CALVERT, WILLIAM G. (Dr.): 503 East Mary St., Austin, TX 78704, USA.
CARR, THOMAS W.: 6626 Weckerly Drive, Whitehouse, OH 43571, USA.
CRABO, LARS: 3 Oswald St., Roxbury, MA 02120, USA.
HOLMBERG, HENRY: Vainiontie 26, 00700 Helsinki 70, FINLAND.
HOLZBAUER, PHILIP A.: S107 W34703 Jacks Bay Road, Mukwonago, WI 53149, USA.
KUZICH, DAVID M.: 11227 Plymouth Ave., Cleveland, OH 44125, USA.
MATSUMOTO, KAZUMA: Dept. of Forestry, Faculty of Agriculture, University of Tokyo, 1-1-1 Yayoi, Bunkyo-ku, Tokyo 113, JAPAN.
MOGOL, JOSEFA L. (Mrs.): P.O. Box 29, Boac, Marinduque, PHILIPPINES. Rhop., Sell; also live pupae.
SAFFLE, MICHAEL: Savignystrasse 45, D-6000 Frankfurt am Main 1, WEST GERMANY.
SCHWARTZ, JOHN D.: Box 83 USARI, APO New York, NY 09053, USA.
VAWTER, A. THOMAS: NOT Thomas A.
WEAST, ROBERT: CORRECT city name is Johnston.
WIERNASZ, DIANE C. (Dr.): Division of Biology & Medicine, Walter Hall, Brown University, Providence, RI 02912, USA.
YODER, D. J.: Interlochen, 1307 Crowley Road, Arlington, TX 76012, USA; phone (817) 792-3896.

The Market Place

Buy • Sell • Exchange • Wants

Items submitted for inclusion in this section are dealt with in the manner set forth on page 8 of the Jan/Feb 1985 NEWS. Please note that in keeping with the guidelines of the Society, henceforth no mention of any species on any threatened or endangered species list will be accepted in these items. Items will be accepted from members only and will be printed only once unless entry in the maximum of two successive issues is requested. Please keep items short. A maximum of 100 words is allowed. SASE calls for a self addressed stamped envelope.

The Society, as always, expects all notices to be offered in good faith and takes no responsibility for the integrity of any advertiser.

FOR SALE: Live cocoons of Argema mittrei, delivery in June. Please write as soon as possible for prices. Brian Morris, 34 Borden Lane, Sittingbourne, Kent ME10 1DB, ENGLAND.

WANTED: Comstock, J. A.. 1958 - Bull. S. Calif. Acad. Sci. 57:149-144 and 1955 - Bull. S. Calif. Acad. Sci. 54:30-35 plus any other reprints of articles by J.A. Comstock published previous to 1955 on any group of Lepidoptera. Jon Shepard, RR#2, Nelson, British Columbia V1L 5P5, CANADA.

WANTED: Correspondence with members have collecting experience in Jamaica. Any information on specific collecting localities and island contacts would be greatly appreciated. All correspondence will be answered. Also WANTED: Copies of the following books; Butterflies: A Handbook of the Butterflies of the United States by R. W. Macy and H. H. Shepard and Colorado Butterflies by F. Martin Brown. State price and condition. David C. Iftner, 2161 Heatherfield Avenue, Worthington, Ohio 43085.

FOR EXCHANGE ONLY: I have 20 personally raised cocoons of Polyphemus Moths. Will exchange for almost anything except Silk Moths, at least of USA. Must be live material. S.A.S.E. letters will be answered. Stan Kendall, 1945 Washington Ave., Wilmette, IL 60091.

EXCHANGE: I plan on rearing Hyloicus luscitiosa this year in quantity. I want to trade for Eupackardia ova or cocoons, or will sell. Orders taken on a first come first served basis. Please write to: Mr. William Houtz RD#4 Box 477, Pine Grove, Pa 17963, USA.

FOR SALE: One new (mint) copy of Butterflies of the Oriental Region (Part II - Nymphalidae, Satyridae, Amathusidae) by Bernard D'Abrera. $85 (incl. postage). Glenn A Gorelick, Citrus College, Biology Dept, 1000 W. Foothill Blvd, Glendora, California 91740-1899

FOR SALE: Cocoons of S. Cynthia, A. io and E. imperialis pupae. Catherine Hartman, 25903 CR24W, Elkhart, IN 46517

WANTED FOR EXCHANGE: Contact with specialists throughout the world in Saturniidae, Brahmaeidae, live material only of better species (mendocino, walterorum, calleta, better Rothschildia, better Automeris, etc., hybrids), better Parnassinae and Colias only, world Cucullinae and Plusinae (only living material). I can offer living material of Saturniidae (S. cynthia walkeri, S. pyri, E. pavonia, S. atlantica, Roth. arethusa, Calig. jonasi, Dict. japonica, etc.). Better Noctuidae (Cucullia, Catocala eggs, pupae), Anth. damone pupae, Parnassinae ssp. (1A papered, also live material) and other better endemic Rhopalocera. Nardelli Uberto, Via Cosma e Damiano 9/2, 38100-Vela-Trento, ITALY

MEMBERS WANTED: The Southern Lepidopterists Society, established in 1978, invites you to become a member. Dues are $5 a year. Subscription includes a quarterly newsletter and occasional bulletin. FREE back issue of bulletin and newsletter upon receipt of dues. Send 1985 dues to Tom Neal, 3820 N.W. 16th Place, Gainesville, Fl. 32605

WANTED: The following publications and books; Butterflies of the West Coast by W.G. Wright; The Macrolepidoptera of the World, English edition, Vol 5, The American Rhopalocera by Adalbert Seitz; Lycaenidae of the Antilles by W.P. Comstock & E.I. Huntington; Butterflies of the Satyrid genus Coenonympha by Demorest Davenport; Systematic Catalogue of Speyeria with designations of types and fixation of type localities by C.F. DosPassos & L.P. Grey; Butterflies of Trinidad and Tobago by M. Barcant; Butterflies of Cuba by D. Marston Bates. Leroy C. Koehn, 16225 Huntley Rd., Huntsburg, Ohio 44046, USA.

FOR EXCHANGE: Wild collected cocoons of Samia cynthia from Ailanthus stands in Brooklyn, New York. WANTED: Cocoons or pupae of other Saturniidae, esp. Callosamia, Eupackardia, Rothschildia, Hemileuca, Automeris, western Hyalophora and Citheronia. Jeff Ingraham, 55 Eighth Ave., Brooklyn, New York 11217.

WANTED: Catocala ova, any species, will purchase. Also desire your price list for papered Catocala ssp. John Jordison, 414 North 61st St., Omaha, Nebraska 68132.

WANTED: Livestock of Prepona, Agrias and Doxocopa; any stages required. Also contact with researchers and breeders of these Neotropical Nymphalidae. Is anyone working with these at the moment or has anything been published recently? Any information welcome, particularly foodplant data and any other details helpful to the breeder. All correspondence will be answered. Please write to: John McFeely, 90 Stonechat Avenue, Abbeydale, Gloucester, GL4 9XF ENGLAND.

EMPLOYMENT WANTED: Will do time-lapse photography, of all stages of living Lepidoptera. 3½ years experience! Contact RANDY ROBINETTE - 201 Powell Mill Rd., Apt. F-205, Spartanburg, S.C., 29301. U.S.A. Phone no; 803-574-1979.

AN UNUSUAL TRADE: I am a dealer in rare films on videotape, and would like to trade films for butterfly specimens that I need. If you are interested in silent and early sound films, please contact me. I am especially interested in world Papilionidae. All correspondence answered. Also interested in trading specimen for specimen. Danny Burk, Box 403, Mishawaka, IN 46544.

FOR SALE OR EXCHANGE: Coccons of S. cynthia. Contact Christy Dews, 1191 Uppingham, Thousand Oaks, California 91360.

MEMBERS' COMMERCIAL NOTICES....

CHANG PI-TZU, P.O. BOX 873 Taipei, Taiwan (Formosa), R.O.C. Selling Formosan butterflies, moths, beetles, dragonflies, cicadas, spiders, wasps, centipedes and other dried insects, living cocoons and ova of butterflies and Saturniidae moths, sexual mosaics and aberrations of butterflies and moths. Also items for collectors, educational aids, art work and gift trade.

META-SCIENCE, P.O. Box 70367 Ft. Lauderdale, Fl. 33307, phone 305-561-9303. For Sale: livestock in pupae form in any quantity of the following - Heliconius charitonius (Zebra), Dryas (Julia), Agraulis vanillae (Gulf Fritillary), Danaus plexippus (Monarch), D. gilippus (Queen), and Limenitis archippus (Viceroy, Southern version).

IANNI BUTTERFLY ENTERPRISES, P.O. Box 81171, Cleveland, Ohio 44181, Phone (216) 888-2310. Excellent quality insect mounting pins, including: Standard Black, Elephant, Stainless Steel. Best prices available. Also, worldwide butterflies, moths and beetles for all price ranges. Superior quality, double boxed for shipping safety. Very personalized service to the beginning or seasoned collector. Offering the most popular books and supplies, featuring an excellent butterfly net. Specializing in Papilio, Morpho and Heliconius. Send $5.00 for one year price list subscription.

TRANSWORLD BUTTERFLY COMPANY (LS), Apartado 6951, San José, COSTA RICA, C. America. NEW SUMMER CATALOG with up to 25% lower prices listed, now available. Specialists in Morpho (45 spp), European butterflies (250 spp), and Parnassius (45 spp). Also general butterflies from around the World. Small orders welcome. SEND $1 Cash/Check, or $6 for years monthly catalogs/newsletters. State interests.

THOMAS GREAGER, R.D. #6 Box 56-B, Greensburg, Pennsylvania 15601. Worldwide Lepidoptera for sale. Have a good selection of species from various parts of the Amazon region of South America. Such as Morpho, Papilio, Caligo, Agrias, Prepona, Heliconidae, and many more. Top quality papered with complete data. Good prices. Satisfaction guaranteed. Free price list sent upon request.

DICK BURGESS, 21, Morecambe Terrace, Great Cambridge Road, Edmonton, London. N18 1LA. England. Seek to buy pupae of the larger species of American butterflies and Moths, in large or small numbers, or contact with anybody who would rear commercially for me. I also have pupae of European and Asian species for sale or exchange.

S. ELLIS, TBC, PO Box 14, Reigate, Surrey RH2 9PW, England. Parnassius subspecies. Write for list of apollo, glacialis, mnemosyne, from Europe. Over 40 species. Send $1 for airmail return postage (check/cash).

B. L. GOOI, P.O. Box 9, Tanah Rata, Cameron Highlands, Malaysia. Selling all species of Malaysian (& occasionally, other Southeast Asian) butterflies, beetles, moths and other insects--many unclassified, for collectors and dealers, and also for artwork. Specializing in montane species of Lycaenids and beetles, both macro- and micro-species. Livestock supply of butterflies, pupae and beetles. For sale or exchange, I would like to have morphos, all colorful S. Americasn butterflies, large beetles and bird-eating spiders. Also used postage stamps. Please write for free list. All letters answered.

JOHN McFEELY, 90 Stonechat Avenue, Abbeydale, Gloucester, GL4 9XF ENGLAND. WANTED: Reliable livestock breeders worldwide to supply newly established UK based specialist breeder/supplier. Top prices will be paid for first class live material. Please write with details of what you can offer now and for the rest of 1985, and give details of what you expect to have available in 1986 and any future livestock plans. All correspondence will be answered.

MICHAEL K.P. YEH, P.O. Box 470, Ipoh, Malaysia. 1985 new catalogue. Send Cash $2.00 to cover postage. Lists of livestock, cocoons, beetles, butterflies, exotic insects, photography etc. Reasonably priced. Ova-Phasmida.

From: The Lepidopterists' Society
Address Correction Requested:
Allen Press
P.O. Box 368
Lawrence, KS 66044

J. Donald Eff 682
445 Theresa Drive
Fairview Estates
Boulder, CO 80303

==========

DEADLINES: Material for the Jan/Feb issue should reach the NEWS EDITOR by Dec 1 of the previous year, and that for the Mar/Apr issue by Feb 15, for the May/June issue by Apr 1 and for the July/Aug issue by May 1, the Sept/Oct issue by Aug 15 and the Nov/Dec issue by Oct 15. Reports for the SEASON SUMMARY must reach the ZONE COORDINATORS listed on the front cover no later than the 5th of January. NEWS EDITOR is June Preston, 832 Sunset Dr, Lawrence, KS 66044, USA. RIPPLES EDITOR is Jo Brewer, 257 Common St, Dedham, MA 02026,USA.

==========

INFORMATION ABOUT THE SOCIETY.....

Membership in the Lepidopterists' Society is open to all persons interested in any aspect of Lepidopterology. Prospective members should send the TREASURER, Eric Metzler, 1241 Kildale Square North, Columbus, OH 43229, USA, the full dues for the current year ($18.00 US), together with mailing address and a note about areas of interest in the Lepidoptera; student membership (must be certified) $12; sustaining membership $25; life membership $250. Remittances must be in US dollars, payable to the Lepidopterists' Society. All members will receive the JOURNAL (published quarterly) and the NEWS (published bimonthly). A biennial membership directory will comprise the last issue of the NEWS in even-numbered years.

Changes of address must be sent to the TREASURER, Eric Metzler, address above, and only when the changes are permanent or long-term.

Information on membership and other aspects of the Society must be obtained from the SECRETARY, Julian P. Donahue, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007, USA. Please notify him of any additions or changes in telephone numbers or areas of interest for publication in the membership directory.

Manuscripts submitted for publication in the JOURNAL are to be sent to Dr. Thomas D. Eichlin, EDITOR, JOURNAL of the Lepidopterists' Society, Insect Taxonomy Laboratory, 1220 "N" Street, Sacramento, CA 95814, USA. See the inside back cover of a recent issue of the JOURNAL for editorial policies.

==========

AVAILABLE PUBLICATIONS OF THE SOCIETY..... Order from the PUBLICATIONS COORDINATOR, Ron Leuschner, 1900 John St., Manhattan Beach, CA 90266, USA.

CATALOGUE/CHECKLIST OF THE BUTTERFLIES OF AMERICA NORTH OF MEXICO (Memoir No. 2), Lee D. Miller & F. Martin Brown: includes references to original descriptions and location of type specimens. Members and subscribers, $10 cloth, $5 paper; non-members, $17 cloth, $8.50 paper, postpaid.

COMMEMORATIVE VOLUME, 1947-1972: a 25-year review of the Society's organization, personnel, and activities; biographical sketches; JOURNAL 25-year cumulative index by author, subject, and taxon; clothbound. Members and subscribers, $6; non-members, $10, postpaid.

1984 MEMBERSHIP DIRECTORY (current to November 1984). Biennial directory of members and their addresses, with geographic and interest indices. Not available for commercial use. (NEWS #6 for 1984). $5.00 postpaid.

BACK ISSUES of the JOURNAL and of the NEWS of the Lepidopterists' Society. For a list of the available issues and their cost, postpaid, send a SASE to the SECRETARY or to the PUBLICATIONS COORDINATOR.