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NEWS of the LEPIDOPTERISTS' SOCIETY

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USA

INCIDENTALLY, IT'S DOOMSDAY

Guest Editorial

Virgin forest and jungle finally crash and crumble, through brief agriculture, into everlasting desert. Rolling meadow and prairie endlessly fragment and fall into raucous, litter-strewn urbanization. Primeval marsh and river, savagely raped for mineral extraction, miserably disintegrate and decay into refuse tips, sewage effluents, and dangerous no-man's-lands. How many readers can honestly claim never to have known at least one of these symptoms of civilization? In their very own area?

Yet amazingly, we, as a wild fauna society, still spend considerable time and ink on fretful, introspective squabbling over such comparative trivia as net versus camera, dealer versus researcher, lumper versus splitter, and amateur versus professional. What about the day when each of these eight busy little armed camps go out into the (? battle-) field and simply find no more bugs available to bolster their respective inferiority complexes with? What about the day when they all go out and can't even find the field?

I often wonder whether our membership is linked by common sympathies or common apathies. Or whether much of it is linked at all? I'm saddened to see our publications predominate heavily with papers and notices of such scientific specialization that they are often too narrow and remote to communicate with most fellow-members, let alone with the layman beyond. I'm disillusioned by the big-mouth "conservationists", so eager to write articles telling everyone else what to do, yet lacking even the courtesy of replying to personal appeal letters when a real habitat crisis urgently needs their active support. In short, I despair of the resulting insular and insincere images which we, and certainly other natural history societies of the world as well, may be presenting to our unenlightened, hard-boiled governments, industrialists, and developers, who have infinitely more power over every single country's wildlife future than we do.

It's high time we worried less about some future Doomsday reducing us all to smoke and ashes at the flick of a switch. Doomsday has already arrived — ecological Doomsday. More insidious, less dramatic, and equally final. Man owes his very existance to the long-evolved habitats which he is now annihilating the world over. Is the Lepidopterists' Society really doing all it can to help control this blind environmental suicide?

For the sake of our butterflies, of course.

Brian Wurzell, 47 Rostrevor Avenue, Tottenham, London N156LA, ENGLAND.

SOME NOTES ON THE LEGAL FORMALITIES INVOLVED IN TRANSMITTING A COLLECTION OF LEPIDOPTERA.....

One topic being discussed by the committee appointed by the Society to study guidelines for the collection of Lepidoptera is the preservation of existing private collections by transmitting them to museums or universities or even to fellow private collectors. Many lepidopterists are so bewildered by the formalities involved in arranging for a transfer that a plan of disposal is never made. As a result, the problem of what to do with a collection may fall upon the heirs. Too often dermestids eventually give the problem a final resolution.

This note is not intended to overcome human inertia; rather, its purpose is to sketch in elementary terms the legal considerations in transmitting a collection. This note assumes that a collector is not in the business of selling insects but is disposing of a private collection as a casual matter.

The views expressed herein are those of the author alone and bear no committee endorsement.

The owner of a collection of lepidoptera can dispose of it in the same ways as a person would dispose of any other tangible personal property. The principal methods of transfer are by gift, by sale, or by will.

A gift is the simplest way of making a transfer. No writing is necessary and a completely legal and effective disposition can be made simply by handing the collection over to the desired transferee, whether the latter is an institution or a private person. The requirements are only that there be an actual delivery accompanied by an intent to make a present gift. If there is no handing over of the property or if the intent is to pass title at some future time, the gift fails.

Complications rarely arise concerning gifts unless the donor tries to do one or more of three things: (1) get the gift back, (2) place restrictions or conditions on the gift or (3) reap a tax benefit.

Generally, a gift is irrevocable. A lepidopterist who is unwilling to part with a collection should not give it away because it cannot be called back at a later date. A gift must be contrasted with a loan, in which case the owner will get the property back at the end of the loan period, or on demand if no term has been agreed.

Sometimes donors have attempted to restrict the recipient in the use or management of the collection. Thus, donors to museums have attempted to impose requirements that the collection be maintained "separately" or that it not be loaned or sold. While restrictions are a highly personal matter, it is suggested that complete discretion be left with the recipient as to the use or disposal of the collection. If restrictions are to be imposed, then a carefully drawn written contract bewteen the donor and the recipient should be executed.

The tax consequences of making a gift of a collection can be astonishingly complex and shockingly incomprehensible if stated in technical tax terms with all the legal qualifications and conditions. At the cost of considerable technical inaccuracy, an attempt has been made to formulate some generalizations.

Subject to numerous conditions, a gift of a collection of lepidoptera to a public museum or university will entitle the donor to take the value of the collection as a charitable deduction under the federal income tax law. A gift to an individual will not be deductable. Actually the amount of the deduction is limited by a concatenation of technical tax law constructs, such as "fair market value", "contribution base", "capital gain property" and "an organization described in Section 170(c)". The deduction may even be limited by the use to which the property is put by the receiving organization. It will hardly be worthwhile to explore all the technicalities, but a few points may be usefully made.

When a charitable contribution is made in property — i.e, a butterfly collection — rather than in cash, the measure is the "fair market value" of the property, that is, the price at which it could be purchased by a willing buyer from a willing seller with both having knowledge of the relevant facts.

How does one establish a fair market value when there isn't an active market? No reported cases or rulings could be located which deal with insect collections, but coin collections, film collections, and art collections have been the subject of tax disputes and it is believed that the same legal considerations will govern gifts of insect collections. With art work, the market value has sometimes been established by expert valuation and sometimes by reference to comparable sales. Nevertheless, the legal test remains the fair market value and sometimes the expert valuations have been rejected by the tax authorities.

One thing that is clear is that market value is not to be measured by the cost of acquisition. Thus, the expenses of expeditions to Ecuador or Alaska or other choice collecting spots are not a direct element of the calculation. Some museums have made a practice of appraising collections which were donated to them. If the figures are reasonable, there is every reason to hope that the valuation will be accepted by the tax authorities. Even if the valuation is reduced, the consequences to the taxpayer who is proceeding in good faith is the disallowance of the deduction and the payment of interest on the amount of the tax deficiency.

As pointed out above, one of the disadvantages of any gift arrangement is that the owner must part with possession before the gift can become effective. To "have one's cake and eat it, too" schemes were worked out by which the donor makes an immediate gift but defers delivery until the donor's death. This sort of arrangement became widely practiced in art circles. An owner of a painting would give it to the local museum now but keep it in his possession as long as he lived. This led to a rule in 1976 that if the donor of tangible personal property reserves a life estate, no contribution is considered to have been made.

This new rule casts some doubt on the program of some museums in accepting a present gift of an insect collection but allowing the donor to borrow all or part of it back on indefinite loan. Technically, the complete gift has been made and the plan might work, but there is danger that the tax authorities would regard the scheme as merely a subterfuge.

Once the value of the collection has been fixed and the organization has been determined to be a fully qualified charity, there are other limitations on the amount of the deduction based on various percentages of the taxpayer's adjusted gross income. The deduction for appreciated capital gain property, that is, property which has increased in value, is limited to 30% of the taxpayer's adjusted gross income. It is believed that an insect collection would ordinarily fit under the classification of property which has increased in value. Suppose, in 1981, Mr. Papilio had an adjusted gross income of $20,000 and made a contribution of his collection, worth $10,000, to State Museum. His 1981 charitable contribution is $6,000 (30% of $20,000). He may carry $4,000 to future years subject to the 30% ceiling. If one assumes the same facts except that Mr. Papilio has an adjusted gross income of at least $33,334, then the entire $10,000 would be deductible in 1981. To complicate matters, there is an election the taxpayer may make which would provide an alternative method of calculation and which may be advantageous if the appreciation of the donated property is small.

If in any year the value of the contributed property is worth more than $200, a rather meticulous data must be filed with the donor's income tax return. The donor must report the name and address of the donee, must describe the property contributed, and must indicate the physical condition of this property. The method of determining he market value must be shown, whether a capital gain was involved, and the donor must also state the date and manner of acquisition. If the value is determined by appraisal, the donor must submit a signed copy of the report of the appraisal.

Gifts made to a charity, which covers most museums

and universities, are not taxable under the federal gift tax statute, and no federal gift tax return need be made. If the gift is made to a private individual, and if the market value of the gift is under $3000 in any one year, no federal gift tax is payable. If the value of the gift exceeds $3000 in a year, there are gift tax consequences and the donor should consider these with his tax advisors.

If a collector wants to retain his collection during his lifetime, he should consider disposing of it by will. If the collector is going to make a will anyway, it is appropriate to ask one's attorney to draft a clause bequeathing the collection to the museum or university of his choice. The language, "I bequeath my collection of Lepidoptera together with the cases and cabinets in which it is stored to the X Museum", should be sufficient. A prospective testator ought to have made contact with the museum in advance to make sure the collection will be welcomed.

Informal arrangements with one's heirs to deliver the collection on death to a museum or to a colleague are usually honored by the heirs, but there is no legal obligation for them to do so. If the collection is passed along to a qualifying museum or other charity, the heirs are entitled to an income tax deduction as outlined above.

In a bequest to a museum or university, the value of the collection will be included in the decedent's estate. Since the gift is deductible under the estate tax law, there is a "wash" situation, so the bequest will not appreciably affect the estate tax liability.

Bequests to individuals are not charitable, but beginning in 1981 the unified estate and gift tax liability does not become a problem until the value of the estate plus taxable gifts reaches $175,000.

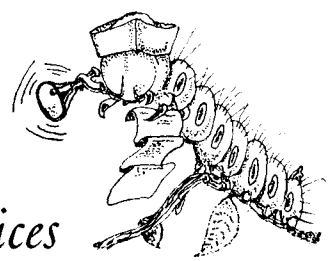
The inheritance taxes of the several states are too diverse for treatment in this note. But in general, bequests to charities are not taxable but bequests to individuals are taxable at state rates.

Sometimes, if one is fortunate, a collection may be sold. Again, no specific formalities are required. Only payment and delivery need be agreed upon. Although neither a written contract or a bill of sale is necessary, these monuments to the transaction may be very useful in establishing the terms of the sale if the parties later disagree.

If the sale should happen to realize a gain, this gain must be reported as income or long-term capital gain for tax purposes, depending on whether the property has been held by the taxpayer for the required holding period. With the budgets of museums being depressed and the cost of collecting being inflated, it may well be that the transfer by purported sale is really a bargain sale in which case, subject to detailed rules, a partial charitable deduction is permitted.

One last cautionary note concerning any peice of general advice is in order. If you have a specific problem which involves amounts of money which you consider significant, the only safe thing to do is to consult the tax advisor of your choice. A little knowledge is a dangerous thing, but it is hoped that it is better than no knowledge at all.

(This article was kindly contributed by Prof. James R. Merritt, School of Law of the University of Louisville, Louisville, KY 40292.)



Notices

INDEED, IT IS LATE.....

At the beginning of May, just as he was about to make up this issue of the NEWS, your editor was flattened by a ruptured intervertebral disc. Thanks to the kind attentions of a friendly neurosurgeon, the situation has been improved to the point where sitting, and even ambulation, are again possible.

My apologies for the delayed ads and the too-late notices. With luck, it may not happen again.

1981 ANNUAL MEETING, COCOYOC, MEXICO.....

Plans for the Annual Meeting continue to evolve, including those for the post-meeting trips to Chiapas, Morelos, and Veracruz.

Most up-to-date information is available through Cardillo Travel (re the meeting) and Julian Donahue (re the trips). All the necessary addresses and phone numbers are to be found on pages 2 and 29 of the 1981 NEWS.

The door-prize bonanza will, as usual, be M.C.'d by Charlie Covell. He requestes that all contributions for door prizes be brought to Mexico with you, or (if you cannot attend) be sent to him at the Department of Biology, University of Louisville, Louisville, KY 40292 prior to 24 July.

MEMOIR NO. 2.....

You still haven't received your copy of the Butterfly List? And you plunked down your hard-earned cash months ago?

Because the typesetting has been done at no cost to the Society, it has been possible to set a low price-tag, but it has not been possible to push for a fixed deadline.

Progress is being made, and as soon as the volumes reach Louisville, Charlie will proceed with distribution.

Perhaps if we were some big corporation, everything would go off just perfectly. Fortunately, we are not.

1983 ANNUAL MEETING (YES, 1983!).....

The 1983 Annual Meeting of the Lepidopterists' Society will be held in Columbus, Ohio, sometime in July of that year. (1982 is planned for the University of Wyoming, in Laramie.) While the Ohio planning committee has thoughts about field trips to introduce members to the great diversity of habitats in Ohio, they are also mulling over some more exotic possibilities.

Would you believe a collecting/sight-seeing trip to mainland China? They have tentative plans for a 14-day junket, leaving right after the meeting, for a tab (at current prices) of about $3500.

What the organizers are looking for right now is an expression of interest — not any binding committment. The groundwork will take a long time to develop. Please send your comments to Eric H. Metzler, 1241 Kildale quare North, Columbus, OH 43229 USA.

NEWARK ENTOMOLOGICAL SOCIETY TRIP.....

The Newark Entomological Society will hold a butterfly collecting field trip on Saturday 27 June 1981. Meet at 11:00 a.m. in the picnic area on Route 70, Lakehurst, N.J., west of town. All interested persons are invited.

J. J. Bowe

THE "PUPAPER" LIVES.....

The PUPAPER, a newsletter published monthly for those interested in the rearing, breeding, and collecting of Lepidoptera and other insects, has resumed publication.

Members of the Lepidopterists' Society are extended the opportunity to subscribe at only half the yearly subscription rate for the remaining issues of 1981. Those interested please send $3.00 for USA, Canada, and Mexico, elsewhere $5.00. Please make all checks or money orders payable (in US currency) to Butterfly World, R.R. 3, Box 390, Pendleton, IN 46064, USA.

ENTOMOLOGICAL SOCIETY OF AMERICA.....

The Entomological Society of America will hold its Annual Meeting 29 November to 3 December 1981, at the Town & Country Motel, San Diego, California.

Further information may be obtained from the Program Chairman, Dr. Vahram Sevacherian, Department of Entomology, University of California, Riverside, CA 92521. Deadline for submission of papers has already passed.

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE.....

Opinion No. 1170 (p.95): SATURNIIDAE Boisduval, 1837 (Lepidoptera): placed on official list.

SEVENTH ANNUAL XERCES SOCIETY BUTTERFLY COUNT.....

The 1981 Fourth of July Butterfly Count will be held between 20 June and 12 July. Participating groups should select one day during this period to compile a list of species and estimated numbers of individuals of each species observed on that day. Groups planning to repeat a count from preceding years should use the same site as a center for the 15-mile diameter circle which comprises the count area and should sample the same habitats as in previous counts, so far as is practical.

For many years North American bird watchers have spent one day at Christmastime counting birds. The same areas are visited each year by teams of local enthusiasts coordinated by experienced leaders. A great deal of comparative data has accumulated on year-to-year fluctuations in populations levels, local extinctions, and so on. The results, published in American Birds, have been used to trace range expansions, plot diversity indices, and in other ways, such as in monitering abundance patterns of familiar species based on an immense data base (Bock, 1979, Natural History, Dec., 7-12).

In 1975 the Xerces Society initiated a comparable count of North American butterflies centered around the Fourth of July holiday. Beginning with 28 counts in 12 states that year, the number of participating groups and persons has increased each season. In 1979 there were 49 counts in 20 states and one Canadian province, involving more than 270 participants, who tabulated from 3 to 66 species. Eight groups reported more than 40 species, and more than 1000 butterflies were counted at 5 sites. Results are enumerated in the Xerces Society publication, Atala.

Persons interested in starting new counts in their areas are urged to do so. It is important to realize that this is not an attempt to compete for the highest numbers with other count areas. Rather, sites should be selected on the basis of their potentials as count centers year after year for the forseeable future, not just for richness or rarities. Most of the interest and enjoyment to participants arises from annual comparison of occurrences in their own count areas. Isolated counts on visits to distant localities are less valuable.

Even if the July 4 season is not optimum, many interesting comparisons can be produced from annual, standardized counting. For example, the surveys have provided new data on locality and seasonal occurrences, indications of declines or increases in abundance (indicated by average individual butterflies/party hour), and new host plant associations.

One person can conduct a count, but experience has shown that parties of two or more generate more data, and depending on the ecological diversity within the count circle, it may be desirable to visit several habitats, which can best be accomplished by several parties. A few rules must be followed in order to make the data comparable: a) an area 7.5 miles in radius from a center, not to be varied from year to year; b) a one-day count of all butterflies collected or sighted (and positively identified, either at species or genus level); and c) accurate records of party-miles, and particularly, party-hours spent in the field, as a measure of census effort.

An instruction sheet and forms for recording data are available from: Ira Heller, Biology Dept., Tufts University, Medford, MA 02155 USA

RE COMMERCIAL SALES OF BOLORIA ACROCNEMA.....

The Uncompahgre Fritillary Boloria acrocnema was first discovered in 1978 in an alpine meadow below Mt. Uncompahgre, in the San Juan Mountains of southwestern Colorado. Subsequent to its discovery, considerable interest has grown pertaining to the systematics, population biology, and conservational problems of this glacial relict. Felix Sperling and I recently published a taxonomic study of this butterfly and some of its close relatives (1980, J. Lepid. Soc. 34: 230-252), and we have several further manuscripts on B. acrocnema's population biology (as revealed by mark-recapture work) presently being reviewed.

Interest in the conservation of B. acrocnema has followed closely on the heels of the biological studies. At present, the US Fish & Wildlife Servoce, US Forest Service, and the Colorado Natural Heritage Inventory, among others, are embarked on management and preservational decisions. Legislation proposing Federally Threatened Status for B. acrocnema is presently pending at the Office of Endangered Species in Washington, DC.

I wish here to communicate briefly with lepidopterists worldwide about several aspects of this conservation work. To summarize from quantitative 1980 field work on the biology of B. acrocnema at its type locality of Mt. Uncompahgre:

(a) during the very brief several-day maximum July flight, only 200-300 adults are present; on all other non-peak flight dates, less than 100 adults are present;
(b) the total number of adults matured during the entire 1980 brood at Mt. Uncompahgre was less than 1000;
(c) adults are short-lived, very sedentary, and exceedingly localized to small areas within the colony site;
(d) on every sampling date, working by myself, I physically handled, marked, and released between 35 an 50 percent of all adults estimated to be present (by the mark-recapture statistics) —— even though I spent but a fraction of my total daily field time doing mark-recapture work.

These findins indicate that, although generally not a concern with most lepidopteran populations, massive collecting over only short time periods could easily detrimentally affect the colony status. By the same token, it is also clear to me that collectors can remove small numbers of adults so long as reasonable restrain is excercised (especially if one limits collecting principally to males).

Commercial mass collecting of Boloria acrocnema by others has already begun (in 1980) at the type locality, and perhaps at several other recently discovered nearby sites. Specimens from this collecting are being offered for sale at prices ranging to over US $125 each.

Considering the biological facts briefly outlined above, I am therefore extending a plea to your conscience to refrain from purchasing specimens of B. acrocnema if

they are offered to you for sale. At present there are no legal constraints on commercial sale of this species, and it is doubtful that restrictive collecting guidelines will be proposed, as long as the status of the Colorado populations remains largely unaltered. I will be most happy to discuss with any interested parties aspects of the present biological studies, and conservational work (including the philosophy of conservation), being conducted by myself and my associates on this relict butterfly species. ..... (Lawrence F. Gall, Dept, Biology 257 OML, Yale University, New Haven, CT 06520.)

FOODPLANT HOLDER FOR LARGE CATERPILLARS.....

Since coming up with this cost-free water container several years ago, I have used it in rearing hundreds of large Saturniid caterpillars with complete satisfaction. Caterpillars don't crawl in and drown. When the container is lifted out for cleaning the cage, it never tips over, even with four fat larvae out on one branch. It can hold few or many, thick or thin, branches or twigs, with enough immersion to keep leaves fresh. Branches can be added or removed without hassle. Evaporation is slow; water can be added simply by pouring onto center top.

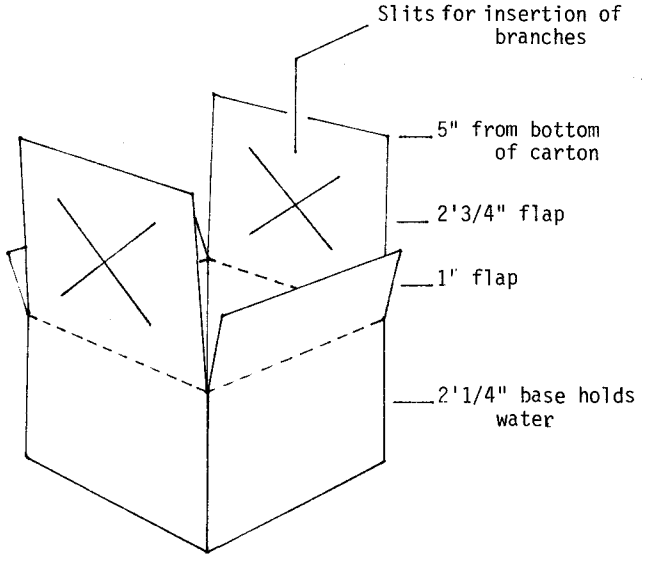
I use these holders with large paper tubs, available free from ice cream stores. The tubs measure 9½" in diameter and 10½" high, enough room for three or four large caterpillars and their day's supply of leaves. An elastic band to hold nylon net over the top can be made by tying a couple of rubber bands to ends of a length of string. Since this set-up costs minimal time or cash it can be discarded without grief in event of disease. With low pupulation density and good ventilation, caterpillars usually remain healthy.

Materials needed: one quart milk carton for each holder.

Tools needed: sharp pointed knife or scissors.

Procedure: slice off top of carton about 5" from bottom. At each corner, slit down about 2-3/4". Find seam in carton, cut that side and the one opposite to 1" flaps; bend these flaps in. Then bend the two longer flaps, which will be nearly square, to form a flat top. If you like to be accurate, draw diagonals across the top and cut along each diagonal about 1" out from center. Or make a guess at center and stick a pin through both layers; cut slits from pinholes through both layers about 1" out toward each corner.

Put water in carton, insert branches through crossed slits, set into paper tub, place caterpillars on branches, cover top. All set. (Harriet V. Reinhard, 23 Belmont Ave., San Francisco, CA 94117.)



HOW TO DO A FIELD EXPERIMENT.....

A couple of years ago I got the idea that Hesperia juba hibernates as an adult in the Sierra Nevada. Since no Hesperiid in the North Temperate Zone is known to hibernate as an adult, this notion prompted a variety of odd looks as well as whispered rumors of a Commission in Lunacy. Anyone who wants to see my reasoning can read J. Lep. Soc. 33 (4): 258-260, 1979. In that note I said: "Absolute proof of overwintering will require detection of hibernating adults in mid-winter, or the recapture in spring of individuals marked the previous autumn." Not being an idle theoretician, I determined to do the latter. (The former was well-nigh impossible in my Donner Pass study area, where mid-winter snows may lie twelve feet deep.) Since spring populations usually run about 10% of fall ones, to have any chance of success I needed to mark a lot of animals. Ably assisted by Mr. Steve Hammack, I marked 109 juba on 2 days in September 1979 — 23 on the 4th and 86 on the 10th. The latter figure includes 5 recaptures from the 4th, so the real total is 104. All were taken at flowers of rabbitbrush (Chrysothamnus nauseosus) along about 4 miles of U.S. Highway 40, and the capture rate on those two days was nearly 100%.

The winter of 1979-80 was a real lulu. It was followed by one of the coldest and wettest springs on record. I returned on 7 June 1980 and saw, but couldn't catch, one juba just in front of the retreating snowline. By 18 June most of the snow was gone. With Mr. Hammack again assisting, 18 juba were taken. (39 were seen, but catching them when there's no rabbitbrush to visit is another story!) Not one of them was fresh, but not one of them was marked, either.

What does that prove? Let's see.

If we apply the Lincoln Index, the most simple-minded of the mark-recapture methods, to the two September figures, we can estimate the population size during that interval. Recall that the Lincoln Index takes the form

$$\frac{T}{N} = \frac{t}{n}$$

where T is the number marked in the first sample, t is the number of recaptures in the second sample, n is the number captured in the second sample, and N is the population estimate. Then,

$$\frac{23}{N} = \frac{5}{86}$$

and N is about 396 for this interval.

Let's assume a 10% over-winter survival rate. Then about 40 of those 396 animals would have survived the winter. Of these about 10 (10% of 104) would have been marked. Then the expected number of recaptures in spring would have been

$$\frac{10}{40} = \frac{x}{18}$$

or between 4 and 5 animals.

Suppose all 39 animals seen June 18 had been captured; then

$$\frac{10}{40} = \frac{x}{39}$$

and we should have had about 10 marked ones.

What can we conclude from our big fat zero? Absolutely nothing.

Since marking was done on two essentially arbitrary days in September, there is no real basis for estimating total autumn population size — only population size during that one week. The Lincoln Index, moreover, assumes a stationary population (no losses, no recruitment), and this is unlikely to be valid for juba. At any rate, the estimate of 396 animals is unreliable: it is likely to be too low, but almost certainly is not too high.

The 10% survival estimate is an average value for samples taken 1972-1979. But there is no particular reason to think it pertained in the winter of 1979-80. In

fact, 39 animals seen on June 18 was an astonishingly large number. We could (perhaps with more justification!) substitute for 10% the ratio of 39 animals seen on June 18 to 86 seen on September 10, which is 45%. Then the expected number of recaptures can be recalculated. However, the expected number of recaptures remains between 4 and 5.

What significance are we to assign to this difference between zero and five? Under these circumstances there are no statistical tests to help us. There are too many unknowns to permit the interpretation of a negative result. The only meaningful result would have been the recapture of one (or more) marked animals. We knew this when we designed the experiment.

The fact that none of this June's animals was fresh continues to support the hypothesis. As the Mets say, wait till next year. (Arthur M. Shapiro, Department of Zoology, U. C. Davis, Davis, CA 95616.)

NOTES ON SPEYERIA IDALIA (DRURY).....

On 28 June 1979 in Delaware Co., Ohio, two individuals of Speyeria idalia were taken while feeding on Asclepias syriaca, the common milkweed. The specimens, one of each sex, were captured on the plants along a country road where crop fields predominate. The nearest undisturbed growth is a stand of trees approximately 365 meters to the east. I failed to find the source of the butterflies until the following season, when I discovered a small field of perhaps 90 x 275 meters in a clearing within the woods east of the original location.

Surrounded by deciduous woods, the area is characterized by low, weedy growth, an occasional red cedar, with many young wild black cherry trees scattered throughout. Along the western edge, rush, Juncus, grows commonly where the soil is rather wet. Yarrow, Achillea millefolium, and milkweed are very abundant, and idalia is often observed feeding from the blooms in midsummer.

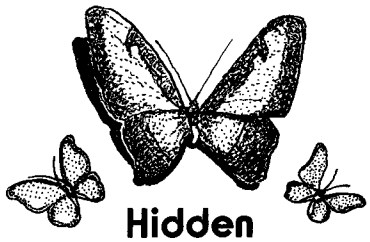
Here I found idalia quite common, with females emerging about ten days after the first males. The females at the start of the season are observed feeding and flying about quite nonchalantly, whereas the males are very active and patrol territories roughly set up at strategic points about the field. One male, recognizable by tattered wings, was most frequently found about the north-central section of the clearing. When frightened, he would temporarily depart, only to return again shortly. The territories overlap greatly; therefore battling between individuals is a common occurrence. After sparring with a neighbor, both again retreat to their respective beats. (When fresh, the males are found feeding and are quite comparable to fresh females in behavior.) During the time when the mating urge is dominant, males fly close to the ground and often into brush as if searching for prospective mates. When a female is encountered, the pair rises together, then suddenly splits apart, with the female returning to feeding and the male resuming his search. At this time of the season, late June and early July, this occurs commonly, as the females are not yet ready to reproduce.

The species wanders widely, as if each individual has a destination to reach. Many are seen heading out into the crop fields to the west for no apparent reason. However, when frightened at some distance away from the clearing, the butterflies promptly head in the direction from which they came, and seek refuge. Males more often fly into the open to escape, while females turn to the woods for safety.

In the presence of inclement weather, such as an impending storm, many males take shelter deep within the rush at the western edge of the meadow. The plants form a very thick cover, and the insects drop into the brush, close their wings, and sit motionless unless disturbed. This is often difficult to do; they sometimes can be touched before taking flight.

During the month of July the species appears to be at its peak of abundance. By August I failed to find another idalia at the location, although the recorded flight period for the insect is June through mid-September. Fresh individuals were noted through the period 23 June to 15 July.

Other species found in association with idalia here include Boloria bellona toddi, Lycaena phlaeas americana and Speyeria cybele. (John Calhoun, 382 Tradewind Ct., Westerville, OH 43081.)



Hidden Morpho Butterflies

A S S E L U C R E H E C U B A P
I M A E A P O L Y P H E M U S E
V E T A R B L U E P E R U M X O
I N X M O R P H O C I X E M O R
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O L M T A N T S E L L I H C A E
B A S H A I M A D I E D A I E N
Z U U O S S U M E D O N A H P T
E S M N O N U B S L I Z A R B I
P I E T B L E L A E R T E S T S
H Z L E R R I A K A C I R E H R
R A T E T A N A J O R T U S A O
I R P I R D D A M H W C W U M D
T I O A O O G X E V D S A I Y A
E T E N N E S T C S I N K D R U
S S N I A U N H R E A T C I I C
G E S S S O L B O R N I R D S E
E N O I R T I H P M A L H E S N
M E S U I R A N E T A C C C A L
C O L U M B I A L E U Z E N E V
E G O D A R T I A U R O R A B Z
C T E O I L L C A S I C A M A I

According to Les Sielski, who submitted the above box of alphabet noodles, there are 44 species of Morpho hidden therein, identifiable from the list below.

Locating them could easily occupy a few hours some night when the moon is full and little is flying. They are best sought out in the form of larvae, which are known to rest at rather odd angles and positions.

aurora	*nestira*	*venezuela*	*diana*
morpho	*adonis*	*achilles*	*mexico*
godarti	*aega*	*noeptolemus*	*mixta*
portis	*luna*	*thamyris*	*hecuba*
helena	*peru*	*cypris*	*eros*
phanodemus	*blue*	*brazil*	*erica*
sulkowski	*amphitrion*	*columbia*	*orientis*
cora	*polyphemus*	*menelaus*	*vitrea*
didius	*deidamia*	*catenarius*	*casica*
trojana	*amathonte*	*hercules*	*eberti*
rhetnor	*laertes*	*zephrites*	*bolivia*

Melipotes indomita (WALKER) IN HAWAII.....

J. Lep. Soc. 33: 136, 1979 contained a note concerning Melipotes indomita in Hawaii which very easily could be understood as if it were the first report of the species in the Islands. This, however, is not so. Melipotes indomita was reported for the first time on 8 June 1969 on a building wall in Manoa and then repeatedly at Hickam Air Force Base and Honolulu Airport. By 7 August the moth had already been found on Molokai, shortly before that date on Kauai, and in September also on Maui. Now the moth is one of the commonest noctuids in the Islands, which is understandable because of the abundance of the foodplant, the monkeypod tree (Samanea saman (Jacq.)). A very thorough description and life cycle of the moth was published by Oda and Mau in the Proceedings of the Hawaiian Entomological Society 21 (3): 435-441, 1972.

(J. C. E. Riotte, Research Associate, Entomology, B. P. Bishop Museum, P.O. Box 19000-A, Honolulu, HI 96819)

Fr. Riotte adds that whenever questions may arise with regards to "new records" in the Hawaiian Islands, the entomology staffs of the Bishop Museum and the State Agriculture Department are ready and willing to assist.

WATER IN THE BAIT-CUP.....

The collapsible bait-trap designed by Austin Platt and outlined on page 38 of the 1980 (May/June) NEWS has one glitch which can be considerably (but not totally) alleviated by a very simple modification.

In showery weather the rain falling on the top surface of the trap causes the mesh to sag, so that the water then runs to the center and drips accurately into the bait-cup, diluting the bait just when the mothing is best.

To remedy this, tie a small button to the end of a heavy thread, run the thread from below upward through the center of the top mesh, and tie it to the supporting stays above (while the trap is suspended in working position), using just enough tension to tent up the center of the mesh a bit.

Such of the rainwater as does not actually splash through the mesh will now run to the periphery and down the sides of the trap.

I have found this more satisfactory than the use of an inverted plastic bag, which tends to give problems on breezy days. (DW)

MORE ON COMBATTING DERMESTIDS.....

Regarding the question Mr. Stammeshaus riased (NEWS 1980, p. 41) regarding preservative measures to keep vermin away from lepidoptera, the procedures outlined below have worked out very well for me:

(1) When relaxing specimens line the relaxing dish with soft tissue moistened with distilled water. Add a few drops of concentrated lysol to the tissue, being careful to distribute them evenly. Add specimens to be relaxed and close dish. The lysol vapors prevent fungal growth in the dish and penetrate the specimens, killing bacteria and fungi. When the specimen is dried there is usually no stain, but the dried lysol in the specimen gives protection against anything that comes along to eat it at a later date, because of toxic properties and probably a disagreeable taste. (The gradual volatility of phenols, such as lysol, suggests that any such protection may be temporary, rather than permanent. Ed.)

(2) When a case appears to be infested, try putting it in a deep freeze. Repeated freezing and thawing will usually do away with the pests. This is especially useful when the case is sealed.

(3) Many specimens can be saved by using a material called "Aero Gloss Model Aircraft Dope Thinner" available at hobby shops. Applied with an eyedropper it penetrates and instantly kills anything within the specimen, and then evaporates, leaving no trace. There may be staining if the specimen has a lot of oil, and matting of fur occasionally occurs on Saturniidae. (Anthony W. Cynor, 2507 E. Banyan Court, Anaheim, CA 92806.)

AN INCIDENT OF INTERSPECIFIC MATING INVOLVING Pieris rapae AND Pieris protodice (PIERIDAE).....

While collecting butterflies on the floor of the San Joaquin Valley near Buttonwillow, Kern County, California on 2 September 1980 I noticed a pair of mating Pierids flying alongside the levee of an irrigation canal where I was walking. I recognized the female as a Pieris protodice Boisduval & LeConte and assumed that the male (which was carrying the female in flight) was also of the same species. Upon netting the joined pair, I was urprised to find that the male was a Pieris rapae (Linnaeus).

The locality was in an area where agricultural fields (especially alfalfa fields) meet alkali flat wastelands. Both Pieris rapae and Pieris protodice are normally common in this area, but on this patricular day only the one P. rapae collected was seen and only seven P. protodice were seen, six of them females. The only male protodice encountered was "hill-topping" some fifteen kilometers distant on the foothills which rim the valley to the west. It would appear that on the basis of the limited numbers of P. rapae available for mating, and the equal non-availability of male P. protodice in the area, that both species were having difficult times finding mates of the same species. Or possibly in the case of the two individuals involved in this particular mating, they were just confused and didn't know the difference.

Both these specimens are now in my private collection. (Ken Davenport, 712 Lincoln St., Bakersfield, CA 93305.)

Sphinx frankii IN INDIANA.....

In The Moths of America North of Mexico, Fascicle 21, Sphingoidea (London, 1971), p. 63, R. W. Hodges Characterizes Sphinx frankii Neumoegen as "probably one of our rarest resident species". He describes its range as extending roughly from New York or New Jersey south through the coastal states to South Carolina and then west through Mississippi to Kansas City, Missouri (the type locality), but indicates that there are no records from many states within this area. He says that the only person who has collected it regularly year after year is Joseph Muller of Lebanon, New Jersey.

In light of this the following records from Brown County, Indiana, may be of interest. On the nights of 6-7 July 1977 Ernest M. Shull and I collected a large number of moths under a mercury vapor light in Brown County State Park, not realizing we had caught anything unusual. I did not get around to spreading and determining the Sphingidae I had collected until October 1980. To my great surprise I discovered I had several specimens of frankii, with some taken on each of the two nights. Shull has since searched through his material from Brown County State Park, where he often collects, and discovered that he also had previously undiscovered specimens of frankii taken at the same location on the following dates: 6 July 1977, 7 July 1978, and 7 July 1980. Our specimens are virtually identical in size, wing shape, pattern, and color with the specimen depicted on Plate 4, Figure 12, of Hodges' work.

Neither Shull nor I know of any other record of frankii from Indiana. We wonder whether it has been recorded from any other locality in the midwest. Such information would be of special interest to us, since we are trying to locate and collect data on local colonies of lepidopterous species which are rare or endangered in Indiana, in order to facilitate their conservation. Shull expects to publish an article soon summarizing preliminary data on a few species and is also compiling information for a preliminary check list of the moths of Indiana. (David L. Eiler, 606 East Seventh Street, North Manchester, IN 46962.)

The NEWS depends on readers' contributions for its most interesting material. While we cannot promise to publish everything, the greater the choice, the better the results. Keep 'em coming!.....RIPPLES will be back next time --- there were logistical problems this month. Ed.

Metamorphosis

DMITRI S. LASTOCHKIN.....

"I am sorry to inform you that Dr. Dmitri S. Lastochkin, an old member of the Lepidopterists' Society, has been killed 19 March 1981 in a road accident at age 71. According to his testamentary disposition, his rich Lepidoptera collection will be deposited in the Zoological Museum, Institute of Zoology, Academy of Sciences of the Ukranian Soviet Socialist Republic in Kiev. He will be greatly missed by those who knew him.

"Please publish a notation in a forthcoming number of the NEWS in order to inform his numerous correspondents world over. It is possible that his exchanges will be continued by the staff of the Museum."

(Yuri P. Nekrutenko, Senior Research Staff, Lepidoptera, Institute of Zoology, Lenin Street 15, SU-252650 Kiev 30, Ukraine, U.S.S.R.)

RAYMOND JABLONSKI.....

We are notified by his parents that Raymond Jablonski died 16 October 1980.

ALBERT C. FREDERICK.....

Albert C. Frederick, of McAllen, Texas, a Charter Member of the Society, died 3 December 1980.

L. CLAIR ARMIN.....

L. Clair Armin, a Life Member from Reedley, California, relied upon by many members as a supplier of insect pins, is reported to have died. No further details are available to us.

ADDITIONAL FOODPLANT FOR Brephidium exilis.....

In a note in Utahensis 1 (1): p. 10, 1981, Joel M. Johnson recorded what is apparently a new larval food plant for Brephidium exilis: Sesuvium verrucosum Raf. (Aizoaceae), or Sea Purslane. A stand of these plants growing in wrack at the high water mark of Lake Utah in early July yielded larvae of many stages which were reared successfully.

Dynamine dyonis Geyer IN TEXAS.....

As a supplement to Joseph F. Doyle's account of the foodplant (Tragia ramosa: Euphorbiaceae) of Dynamine dyonis in Texas (J. Lep. Soc. 33: 20, 1979), we record here his description of the early stages:

Egg (Fig.1): 0.5 mm. at base, 0.7 mm. in length; truncated cone with rounded base; apex with toothed appearance; color white with silvery lustre; 18-20 vertical ridges resembling strings of beads. Oviposited singly on leaves, stems, and stem axils of food plant.

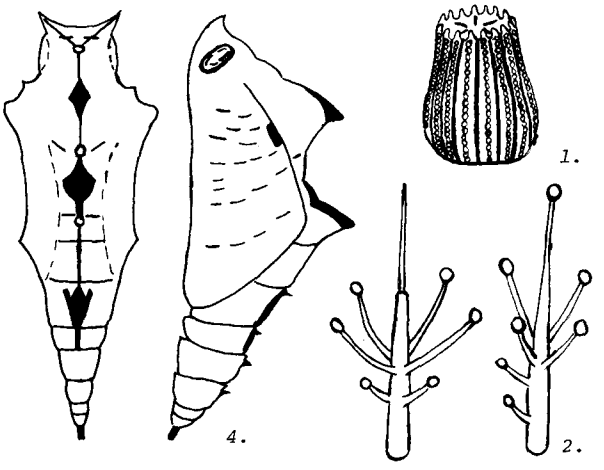
First instar larva: length 2 mm.; body amber colored when first emerged, and covered with fine cilia; green color is seen within a day or two; head brown.

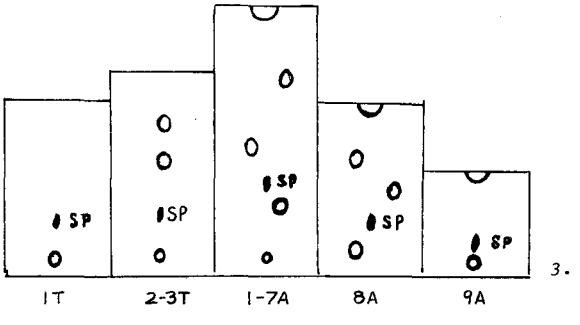
Second instar larva: length 5 mm., head and body green; body covered with tubercles as described for last instar.

Third instar larva: length 10 mm.; appearance as in second instar.

Last instar larva: length 15 mm., width 5 mm.; head pale green and covered with short white setae; slug-like green body slopes ventrally and is covered with tubercles (fig. 2) bristled with radiating branches and spines (diagram, fig.3); most branches terminate in spheres which have adhesive quality; faint white stripe running longitudinally, at base of subdorsal tubercles; mid-dorsal line darker green than rest of body passes the entire length of the larva; legs and prolegs green.

Pupa (fig. 4): length 15 mm., 5 mm. wide at basal joint of wing cases; overall color green with brown or silver markings on thoracic and abdominal prominences;





prominences give appearance of double fins when viewed laterally; short, thin brown streaks horizontally and vertically on wing cases; difference of silver or brown pupal markings cannot be used to predict sex. Pupae are usually suspended from stems of the food plant.

Larvae are extremely slow-moving and when disturbed show a tendency to drop from the plant and curl into a protective ball-like attitude. Cannibalism is rampant in the early instars (eight larvae remained of a hatch of twenty-four). It is possible that the sticky substance at the end of the tubercles discourages cannibalism in the later instars. This substance may also aid the larvae in discouraging predators or preventing falling from the food plant. Early instar feed on young leaves and graduate to mature leaves as they grow. Reared larvae and those found in nature feed and rest on the undersides of the leaves.

(Joseph F. Doyle, III, 11839 Monticeto Lane, Stafford TX 77477.)

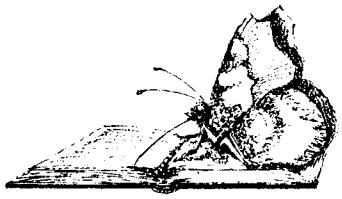
Proserpinus clarkiae Bdv. .....

Moths of America, Sphingoidaea, by R. W. Hodges, mentions on pages 137 and 140 that the larva of Proserpinus clarkiae is unknown and that it supposedly feeds, according to Boisduval, on Clarkia (Onagraceae), and that it has not yet been reared.

The writer has reared this little hawkmoth on several occasions since 1969, after the discovery of the larval food plant, Epilobium paniculatum (Onagraceae), an annual plant of inconspicuous appearance. In confinement, the larva accepts other Epilobium species, as for instance, E. angustifolium; however, intestinal disorders due to the substitution are frequently fatal.

In the early larval stages the larva is glaucous green, and in the fourth instar the caudal horn is replaced by a button. In the fifth and last instar the body of the larva is pastel purple and minutely dotted with black. The wide band on the dorsum and the wavy band on the side along the line of the spiracles are dark fuscous or black. The pink button in place of the caudal horn is ringed with black and centered with an elliptical spot.

(Helmut P. Kimmich, 3372 Mahon Ave., North Vancouver, B.C., CANADA V7N 3T6.)



Books

Butterflies and Moths of Newfoundland and Labrador, by Ray F. Morris, 1981, Agriculture Canada. Hard cover edition with 407 text pages, 34 color plates with life-size photos of nearly 600 species of butterflies and macro-moths, many never illustrated before. Price: $15 in Canada, $18 postpaid to other countries. (Note: price is in Canadian funds, not the same as US dollars.)

Prepaid orders only, check or postal money order to "Receiver General for Canada", mailed to Canadian Government Publishing Center, Hull, Quebec, Canada K1A 0S9

The plates alone make this a worthwhile investment.

Entomological Bibliography of the California Islands, Scott E. Miller and Arnold S. Menke. Santa Barbara Museum of Natural History Occasional Paper 11: 1-78, 1981. Price $4.00 plus $1.00 postage and handling, plus $0.24 tax in California.

A comprehensive bibliography on insects and other terrestrial arthropods on the California Channel Islands, the San Francisco Bay area islands, and the Los Coronados Islands, containing over 550 annotated and cross-referenced citations. Also includes historical summary of entomological research on these islands and selected general references on the flora, fauna, geology, and climate of these islands.

The following notes from E. W. Classey should be welcome:

"I feel sure that it will interest members of the Lepidopterists' Society to know that, at last, a Supplement to Warren's Monograph of the Genus Erebia is with the printer. The Supplement includes a new review of the tyndarus group and throws fresh light on the riddle of Erebia serotina. It will consist of 20 pages containing 2 half tone plates and another half tone illustration in the text and will be in the same format as the original volume. It should be ready by July this year.

"The price, including postage and packing, will be £5.00 or US $12.00, and we would be glad to have support for this project in the form of orders right now (P.O. Box 93, Faringdon, Oxon. SN7 7DR, ENGLAND). We regret that our project to reprint the original at the same time and under the same cover as this Supplement was not possible, as the sheer size of the original would have made it uneconomic.

"D'Abrera's Butterflies of the Neotropical Region, Part 1, Papilionidae and Pieridae, is still with the printers; we understand that it might be published around October or November.

"The Moths of America North of Mexico is still in proof stage and we hope to let you have further news shortly as publication draws near. The Check List will come first and then the green Geometrids, which will be a memorial to Dick Dominick, next."

Research Notices

❖ A FAUNAL CHECKLIST for the moths of Georgia, USA, is in preparation. Accurate records with complete data are desparately needed for species in all families. If possible, undetermined Georgia material will be determined in exchange for records. Any individual, institution, or museum having such material and/or data or literature references, wishing to contribute, should contact me as soon as possible. All correspondnce is welcomed. Scott N. Brown, University of Georgia, Dept. of Entomology, Athens, GA 30602.

❖ WANTED: immature stages, larvae, and or pupae, of of Elaphria spp. collected in southeastern USA, for taxonomic study. Please provide collection data, location, and host plant. Emmanuel O. Ogunwolu, Det. of Entomology, Louisiana State University, Baton Rouge, LA 70803, USA.

❖ SATURNIID COCOONS of all species needed for a comparative study, by gift or purchase. Write with quotes if not a gift. Please include as much of the following as you can: species; site collected or reared; if reared, where native; foodplant; sex of pupa, if pupa not included; year spun; spinning orientation. Steve Graebner, Dept. of Zoology, University of Wisconsin, Madison, WI 53706. Tel. 608-262-0029. Will reimburse postage.

❖ WANTED: correspondence and/or loan or exchange of specimens with collectors of western Catocala, esp. pura, ilia, violenta, and others at limits of their ranges. Need distributional data for Catocala fascicle of MONA. A. E. Brower, 8 Hospital Street, Augusta, ME 04330.

❖ WANTED: by exchange or gift, series of Callophrys (Incisalia) niphon and C. eryphon (Lycaenidae), with complete data, from any part of their range, for a study of morphological variation. Other species of Incisalia are also of interest, as well as locations of collections with 10 or more specimens of either niphon or eryphon available for loan. All cooperation will be acknowledged. I have a limited number of Canadian butterflies for exchange. James D. Reist, Dept. of Icthyology & Herpetology, Royal Ontario Museum, Toronto, Ontario, CANADA, M5S 2C6.

❖ WANTED: properly preserved or live early stages of Pieridae (specifically Neophasia, Pieris, Euchloe, Eurema and Ascia), especially chrysalids, for venation study by Japanese colleague. Glenn A. Gorelick, Dept. Biology, Citrus College, Box RRR, 18824 East Foothill Blvd., Azuza, CA 91702.

❖ WANTED: specimens of nearctic Notodontidae and Lymantriidae, especially Dasychira tephra (Hbn.) for scientific study by East German colleague. Glenn Gorelick, address above.

❖ WANTED: all available data and current locations of specimens of butterflies and skippers taken in Manitoba, in order to compile a checkilst. Would like to correspond with anyone who ever collected here. Of special interest are the following species, most of which are rare or strays in Manitoba: Papilio bairdii, P. troilus, Colias cesonia, Eurema mexicana, Nathalis iole, Euchloe olympia, Callophrys eryphon, C. spinetorum, Strymon melinus, Lycaena epixanthe, Plebejus optilete, Junonia coenia, Nymphalis california, Euphydryas phaeton, Speyeria idalia, Neominois ridingsii, Atrytone delaware, Hesperia spp., Pholisora catullus. Paul Klassen, Box 212, Elm Creek, Manitoba, CANADA ROG ONO.

Address Changes

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WILLIAMS, BRIAN: 19 Paulart Dr., Toronto, Ontario, CANADA M9B 3V5

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VAN CLEAVE, MARCIA: 2101 New Jersey, Joplin, MO 64801
WILLIAMS, KYSANDRA: Star Rt. 3, Standish, CA 96128

Items submitted for inclusion in this section are dealt with in the manner explained on page 9 of the 1981 NEWS (Jan/Feb issue). Please note that it was decided several years ago to exclude prices from the published notices, except for the prices of lists and printed matter. "SASE" calls for a self-addressed, stamped envelope. Notices will be entered once, unless entry in two (maximum) successive issues is requested.

FOR SALE: Choice Canadian and Canadian Arctic butterflies, including B. distincta, B. improba, E. fasciata, E. mackinleyensis, P. dodi, P. oregonius, etc. All specimens guaranteed A1. Will exchange for certain nearctic species including most P. indra ssp., B. acrocnema, et al. Write for complete list: Jim Trowbridge, RR#3, Caledonia, Ontario, CANADA N0A 1A0.

WANTED: used Riker mounts, 8" x 12" or larger. Poor condition is OK, as I can replace cotton or glass. Noel LaDue, 5812 Mark Twain Ave., Sacramento, CA 95820.

FOR SALE OR TRADE: Plebejus chlorina; wanted, by trade or purchase: P. indra martini. Noel LaDue, address above.

FOR SALE: pair of Priamus poseidon; Graphium weiskei from New Guinea; Trogonoptera brookiana. For info send SASE to Janice Logan, Route 1, Fayetteville, IN 37334.

FOR SALE: H. L. Lewis "Butterflies of the World", over 5000 color illustrations, excellent condition; out of print. Send offer with SASE to Janice Logan, address above.

FOR SALE: foreign Papilio, Morpho, & Ornithoptera, and Manitoba butterflies and Catocala. Have O. daura alberta (Pine Ridge) and Catocala manitoba (rare). C. S. Quelch, 20 Highgate Rd., Toronto, Ontario, CANADA

WANTED: living cocoons of Saturnia and Apagema spp. (Saturniidae); living pupae of Papilio indra, P. bairdii, P. zelicaon, P. rudkini, P. nitra. Will buy or trade. Have papered A1 Colorado butterflies, some N.A. and exotic Saturniids for exchange. Steve Stone, 755 Parfet St., Denver, CO 80225, USA.

WANTED: Coenonympha, for a revision of the Genus. Richard E. Gray, Aux. RR#2, Enfield, NH 03748.

FOR SALE: Ornithoptera croesus lydius (pair), ♂ Papilio gambrisius, ♂ P. karna; 180 Mexican and 280 Ecuadorian butterflies. SASE to Brian Harris, 13692 Berkshire Way, Garden Grove, CA 92643.

EXCHANGE ONLY: will exchange tropical butterflies, moths, beetles and other insects for all North American butterflies and moths, papered named specimens only. M. Zappalorti Sr., 123 Androvette St., Staten Island, NY 10309.

FOR SALE: Seitz: Macrolepidoptera of the World (German text), Vol. 5, Rhopalocera americana, and Vol. 6, Bombyces & Sphinges americanae; first class copies; best offer. Prof. Clas M. Naumann, Auf der Egge 57, 4800 Bielefeld 1, WEST GERMANY.

WANTED: any and all Oeneis, world-wide. Can offer limited Yukon, B.C., and Saskatchewan material in exchange. G. Anweiler, Site 60, Box 8, RR1, Lantzville, B.C., CANADA V0R 2H0

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P. J. D. HUGO, 38, Cotswold Crescent, Chipping Norton, Oxon, OX7 5DT ENGLAND: Data labels printed to your requirements in a variety of styles and in any quantity. Overseas enquiries especially welcome. Write for full details and sample labels, mentioning this journal.

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DEADLINES: Material submitted for inclusion in a particular issue of the NEWS should reach the NEWS EDITOR no later than the 15th of the preceding even-numbered month. Reports for the SEASON SUMMARY must reach the ZONE COORDINATORS (listed on front cover) no later that 31 January.

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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 the full dues for the currect year ($18.00 US), together with mailing address and a note on areas if interest in Lepidoptera; student membership (must be certified) $12; sustaining membership $25. 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 list will comprise the last issue of the NEWS in even-numbered years.

Information on membership may be obtained from the TREASURER, Ron Leuschner, 1900 John St., Manhattan Beach, CA 90266, USA. Changes of address must be sent to the TREASURER, and only when the changes are permanent or long-term.

Other information about the Society may 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 of interest for publication in the membership list.

Manuscripts submitted for publication in the JOURNAL are to be sent to the JOURNAL EDITOR, Dr. Thomas D. Eichlin, 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.

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AVAILABLE PUBLICATIONS OF THE SOCIETY.....

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