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THE OFFICIAL PUBLICATION OF THE SOUTHERN LEPIDOPTERISTS' SOCIETY ORGANIZED TO PROMOTE SCIENTIFIC INTEREST AND KNOWLEDGE RELATED TO UNDERSTANDING THE LEPIDOPTERA FAUNA OF THE SOUTHERN REGION OF THE UNITED STATES

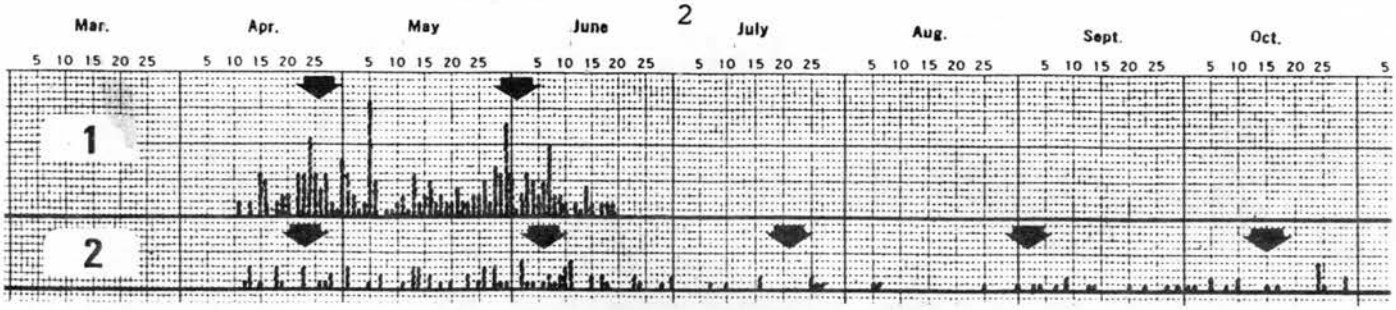
ADDITIONAL INFORMATION ON THE GEOMETRID GENUS NEMATOCAMPA IN LOUISIANA

VERNON A. BROU JR.

In the recent Nematocampa revision (Ferguson 1993), three species are validated. The two species occurring in the southeast United States are Nematocampa resistaria (H-S) and the smaller newly described species Nematocampa baggettaria Ferguson. Ferguson gave the flight period of resistaria as April to July for Louisiana and Mississippi, stating two broods occur in the south.

Fig. 1 illustrates the dates of capture for resistaria in La. for light-trapped adult specimens presently in the author's possession. The data clearly confirms two broods peaking about April 26 and June 1, with a brood interval of 37 days.

For baggettaria, Ferguson listed specimens from April to September. The apparent paucity of specimens (n=20) in the description gave little insight as to the actual number of broods occurring. Fig. 2 illustrates the dates of capture for baggettaria in La. for light-trapped adult specimens presently in the author's possession. In La., the species appears to have five broods peaking at about 44-day intervals. The first brood peaks about April 23, and the last brood occurs during October. Additional data may improve the accuracy of these initial findings for this new species.



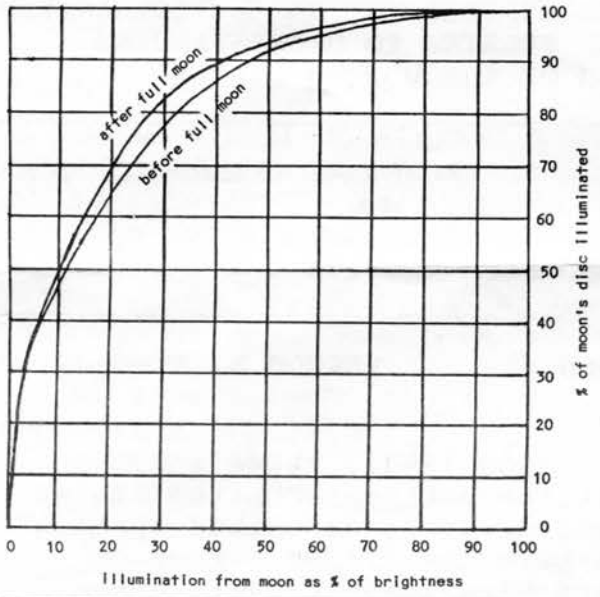
Figures: Dates of capture in Louisiana for: (Fig. 1) N. resistaria (n=248), (Fig. 2) N. baggettaria (n=113).

Reference

Ferguson, D.C. 1993. A revision of the species of Nematocampa (Geometridae: Ennominae) occurring in the United States and Canada. **J. Lepid. Soc.** 47:60-77.

INTERESTING FACTS ABOUT MOONLIGHT FOR LIGHT TRAPPERS

VERNON A. BROU JR.



1. Synodic month = 29.53 days.
2. Zenith occurs 50 minutes later each day as the phase changes.
3. There is more moonlight during the period between a new moon and a full moon than in the period between a full moon and a new moon. For example, when 50% of the moon's disc is illuminated during the latter period only 10% of the brightness exhibited by a full moon is reached, whereas during the former period 11.5% of full moon brightness is attained.

THE GENUS CALLOSAMIA PACKARD (SATURNIIDAE), IN LOUISIANA

VERNON A BROU JR.

ABSTRACT. New information on the Saturniidae genus Callosamia Packard, in Louisiana, is discussed. Two species are newly reported for the state: C. angulifera (Walker) and C. securifera (Maassen). Dates of capture illustrating number of annual broods are displayed for two species.

Additional key words: moths, voltinism.

Ferguson (1972) reviewed three species of Callosamia Packard in North America, north of Mexico, restoring the genus to full rank. He listed the ranges of the species in the Gulf coastal area as: C. promethea (Drury) to include the area Florida to eastern Texas, C. angulifera (Walker) to include the area Florida to the Mississippi River, and C.

securifera (Maasson) to include the area Florida to Mississippi.

Both Ferguson (1972) and Covell (1984) stated all three species are double brooded in the southern part of their ranges, though Ferguson did note the possibility of a third brood of securifera in Florida. C. promethea was first reported for Louisiana by von Reizenstein (1863), who stated the species had only one brood occurring in February and March in the New Orleans area. All of these prior statements concerning voltinism for these species appear incorrect in Louisiana. Less than a dozen female specimens of promethea have been collected using ultraviolet light traps by this author, confirming Ferguson's statement "...only females of promethea are collected at light". No wild collected males have been collected at light despite over 380,000 light traps hours logged throughout Louisiana over the past 24 years by this author. Dates from the few promethea specimens indicate this species does have more than one brood, having been taken in the months of March through August, and in the parishes: East Baton Rouge, Iberville, St. Tammany, and Tangipahoa.

Where encountered in areas undisturbed by artificial lighting, C. angulifera is a rather populous species. Often hundreds can be collected on a single night with a single light trap, where males are five times as common as females. C. angulifera have been collected February through September, and in the following parishes: Ascension, East Feliciana, Evangeline, St. Helena, St. Tammany, Tangipahoa, and West Feliciana.

Ferguson (1972) agreed with and noted prior literature records of angulifera's mating activity occurring between dusk and midnight. In Louisiana, flight time begins just after dusk and continues for about two hours, based on light trap data. Fig. 1 illustrates time of capture at ultraviolet light, and peak activity 45 minutes to one hour after dusk, roughly about 2100 hours (CST).

Ferguson (1972) stated "only female of C. securifera are collected at light". Based on the past 12 years of year-round light trapping, I have found securifera females to be five times more prevalent than males at ultraviolet light. One noteworthy occurrence, having taken 54 securifera one night using 5 light traps, 53 specimens were male.

The third brood of securifera is 20-25% larger in size, with elongated wings and less brillantly colored than the first brood. Some specimens are so different that they appear to be different species. This notion is dispelled when a large series of specimens representing various broods are compared. The second brood appears intermediate, without the extremes of variance in size and brillance noted in adjacent broods. This brood's specific appearance phenomena occurs in many lepidoptera species including other multiple brooded Saturniidae species e.g. Actias luna (L.), where the first brood specimens appear small, narrow-winged, boldly colored green with strong purple markings, as opposed to fall specimens being larger, broad-winged, and pale green with dull purple to brown markings. Ferguson (1972) did mention brood related variances in appearance of angulifera, but made no mention of this concerning securifera. Fig. 2 illustrates size differences of typical spring versus fall broods.

All three Callosamia species occur at my home near Abita Springs. Fig. 3 represents dates of capture for the two common species, C. angulifera and C. securifera taken at this location using ultraviolet light traps. It appears both of these species have at least three broods, angulifera peaking at approximately 58-day intervals, and securifera peaking at approximately 69-day intervals.

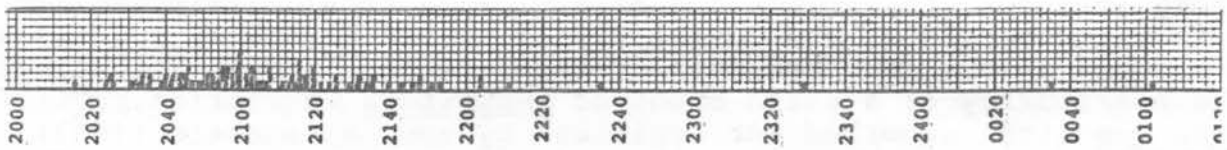


Fig. 1. Time of capture (CST) of male and female C. angulifera captured at ultraviolet light during 2 random nights, Aug. 1992, at sec76t1sr3w, near villages of Weyancoke and Turnbull, LA. One dot equals one specimen, n=83.

Fig. 2. C. securifera male phenotypes: A. first brood, B. third brood.

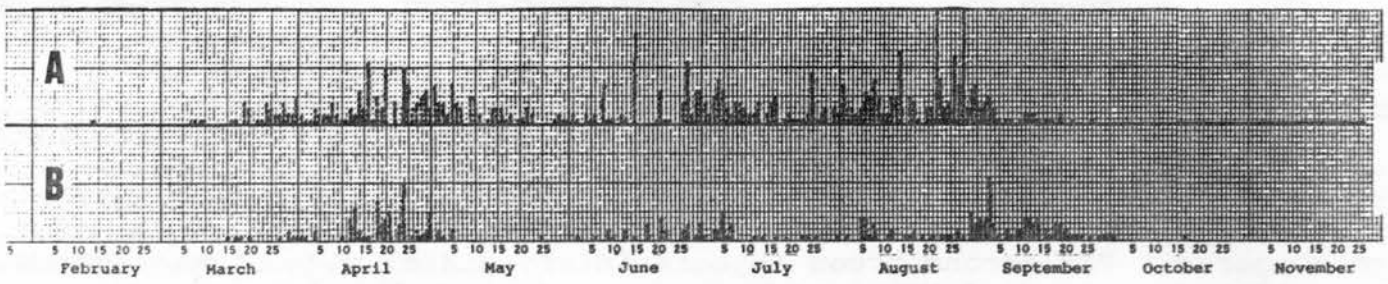


Fig. 3. Dates of capture for Callosamia at ultraviolet light traps 1991 - 1993, at sec24T6SR12E, 6.8km. NE Abita Springs, LA. A. C. angulifera n=485, B. C. securifera n=226. 1 dot=1 specimen.

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von Reizenstein, L. 1863. **Catalogue of the Lepidoptera of New Orleans and its vicinity.** Isaac T. Hinton, New Orleans, 8pp.

Ed. note: The following article represents the personal opinions of the writer and does not constitute an official position of the Southern Lepidopterists.

IT'S TOUGH TO BE A LEPIDOPTERIST TODAY **TOM NEAL**

Remember the time, not so long ago, when professionals and amateurs could pursue their interest in Lepidoptera or, for that matter, entomology in general with little interference. Sure, there were the occasional yahoos who found us to be a source of amusement every now and then, but generally the public attitude had been one of indifference. As many of you are acutely aware, this is no longer the case as we find ourselves under assault from several quarters. Personally, I have done very little collecting lately, mainly because, although I'm used to being considered a little "crazy", I'm not accustomed to being deemed a "murderer" of wildlife, or a "plunderer of the environment", or even an enemy of property rights. Nevertheless, all of these attitudes are increasingly becoming excess baggage on not only the study of Lepidoptera, but upon the study of natural science as a whole.

Given the relative rapidity of the above-mentioned changes I have had some difficulty sorting out in my own mind just how or if all of the seemingly disparate elements fit together, but I'm going to make a stab at it here. First I'll discuss the individual components that I believe constitute a threat to entomological study.

The most obvious of these elements have been the absurd attempts by various state and federal agencies such as the United States Fish and Wildlife Service to apply to insects the same laws meant to protect vertebrates and plants. The following two articles discuss this in detail and I'll limit myself to a few observations. First, the difference in biology between insects and the other groups renders any comparisons totally irrelevant. The reproductive potential of insects is their best defense against predation, and allows them to repopulate a habitat rapidly even in the face of sustained predation pressure. It's the name of the game in the insect world and the effects upon an insect population from an "extra" predator (lepidopterists etc.) are largely nonexistent. Compare the number of insectivorous animals (birds, bats, spiders, other insects, fish, automobiles, bug zappers etc.) to the incredibly small number of amateur and professional entomologists and you see what I mean (C'mon how ridiculous is this anyway?). Second, the key to any insect's survival is habitat and any conservation efforts should be focused on this area. The foodplants etc. have to be there and any impact on these constitutes a dire threat indeed. Finally, as a taxpayer, I have to marvel at government's ingenuity for finding new ways of wasting limited resources.

Another source of potential problems is what I might call the "Bambification" of some insects, particularly butterflies. This is the growing public ethic which views a species as a collection of individuals, each to be valued as an single entity worthy of sympathy and affection and endowed with the natural right to life, liberty, and the pursuit of happiness and perhaps posessing a soul. An obvious manifestation of this sentiment is the animal rights movement which has bedeviled scientific inquiry and environmental protection efforts in recent years. As nearly as I can tell, this arose as a perversion of environmentalism which, with its emphasis on ecosystems and species as a whole, is too complex and impersonal for many people to relate to (It's too big to hug, so to

speak.). They don't want to be troubled with the facts; instead they're comfortable with running on pure emotion. As a result these people tend to be quite intolerant of other points of view.

In the field of Lepidoptera this attitude is manifest by many enthusiasts of butterfly watching and butterfly gardening. Now, before anyone feels as though their toes are getting stepped on let me say that there is nothing inherently wrong with these activities and I enjoy them myself. They just shouldn't be confused with science. Although butterfly watching is of some use for providing distributional data, many species are nearly impossible to identify in the field and, as many of you know, frequently the only way to study them properly is to KILL them. Anything less will frequently result in seriously erroneus data. The situation cannot be compared to birds which are identifiable in the field and were taxonomically and behaviorally "figured out" a long time ago. The study of insects, by comparison, is still a scientific frontier even in the case of such well-known groups as butterflies. Here again, the biology of insects discussed above comes into play when comparing the relative importance of the individual butterfly to a single bird.

In the case of butterfly gardening the only species likely to take up residence in gardens are those wide-ranging and ubiquitous species that have little in common with, for example, the many "insignificant" skippers with more specialized habitat requirements. Indeed, if any of these happen to stray into the garden they probably wouldn't even be seen by most people, much less identified. In any event, the point I'm trying to make is that these activities are no substitute for real research. Unfortunately, many gardening and watching enthusiasts are hostile to just the sort of in-depth study that is necessary to ever fully understand Lepidoptera. I can guarantee that lack of understanding is a much greater threat to an insect species than even recreational collecting.

Another national trend that threatens to adversly affect the study of insects, is the burgeoning property rights movement sprouting up around the country. To put the problem in a nutshell, nobody wants someone to find a rare bug on their land and have environmental restrictions placed on the use of that land as a result. Here again, what before was a simple issue of asking and generally receiving permission from an indifferent or bemused landowner now is beginning to be perceived negatively. The lepidopterist is now a potential enemy. This attitude represents a backlash against the multitude of environmental laws enacted within the last 20 years resulting in the Environmental Protection section of the Code of Federal Regulations ballooning to 12,000 pages. By contrast the section on food and drugs takes up a relatively modest 4,240 pages. This tendancy by Congress to micromanage the environment has put burs under a lot of saddles and extending endangered species protection to arthropods certainly is not helping matters. Is there really anyone out there who can understand why they can't develop their land and get rich because of a bug?

How all of this plays out in the long term remains to be seen, but trends don't appear good. In any event it represents somewhat of a dilemma for lepidopterists. As a group we are probably by definition among the most environmentally sensitive around. There aren't many species in mall parking lots. Probably the majority of lepidopterists, like myself, belong to one or more national environmental organizations. Nevertheless we frequently are being considered the bad guys. Unlike most branches of science, contributions by amateurs to entomology are indispensable.

Professionals are few and most are engaged in agricultural research. Without amateurs to do the work the information would never be available to help make environmentally intellegent decisions. In spite of this, governmental agencies which rely on such amateur-generated data are showing an increasing tendancy to exclude their participation. Then there is the risk of government regulators using data in a way that the general public finds to be unfair. What is a lepidopterist to do?

The response of lepidopterists to all of this pressure has been rather interesting. One thing I've noticed is a certain tendency to go "underground" which is understandable given our woeful lack of political and popular clout. This can include dropping out of high visibility organizations, avoiding written correspondence, changing specimen labels, destroying specimens, and the use of code words to avoid employing of such hot button terms as "collect". The general atmosphere is reminiscent of the McCarthy era when everyone had to be careful about every word they said. Amazingly, a seige mentality is developing over something we all thought was harmless fun.

There is some sentiment for hunkering down and waiting out the storm. The rationale goes something like this: When the public gets sick and tired of government environmental policy being determined by bugs and worms etc. there will be a tremendous backlash which will overwhelm the environmental movement and when the smoke clears everyone can grab a net. Such organized resistance has already arisen in the form of the takings/unfunded mandates "movements" which have been building rapid momentum recently. Essentially, these groups are interested in subverting environmental legislation which may restrict use of and potential financial gain from private property and thus constitute a "taking" (Bill of Rights 5th Ammendment: "The government shall not take property without just compensation"). Unfortunately, taken to its logical conclusion this would negate virtually all environmental, zoning, and any other regulations in which the costs of compliance are not borne by the government. For obvious reasons this may be a cure worse than the problem. One may be able to collect in their favorite wetland, but it might have turned into a toxic waste dump.

Another scenario involves even more draconian regulations being developed as the public anti-collecting ethic develops and creates a political climate encouraging more government interference. I think this scenario is more likely in the long run given that demographic trends favor the increase of urban nature enthusiasts over ranchers and miners.

Serious proposals to combat these problems may take several forms. In some cases a formal working relationship between lepidopterist organizations and government agencies has been established. This has resulted in some success such as in Ohio, but requires an enlightened approach by government. Other lepidopterists are suspicious of government motives, particularly in how the resultant information is used in regulatory decisions (I personally have some problems in this area). In Louisiana a license is apparently now required to use state-owned natural areas, even to simply walk there; the rationale being that users should pay for the facilities. Maybe the time will come when naturalists and scientists will need to be licensed to regulate consumptive activities and finance purchases of wildlife habitat. Others (see following articles) encourage playing by the rules while applying pressure to government through a letter-writing campaign involving members of all scientific disciplines affected. I would encourage this effort. I also would

encourage everyone to take every opportunity to enlighten individuals who may not understand the significance of our activities. Unfortunately, I haven't found any magic bullets to share with you. I would close by reassuring those of you who have an interest in insects other than scientific that individuals who collect and study them are not the enemy. They are providing a useful function that is in many cases not at taxpayers' expense. There is so much more to learn.

ENTOMOLOGY AND THE LACEY ACT **M.C. THOMAS**

(**Ed. note:** This article is reprinted from the Research Associate Newsletter of the Florida State Collection of Arthropods with permission of the author. Dr. Thomas is a Taxonomic Entomologist specializing in Coleoptera and Orthoptera and is employed by the Florida Dept. of Agriculture and Consumer Services.)

Collecting insects is no longer the benign, enjoyable pastime that most of us discovered in our childhood. We are now faced with ever-increasing quantities of red tape and the necessity for obtaining permits to collect just about anywhere except in our own backyards. The penalties for not wading through the red tape can be draconian.

Most of us were ignorant of these regulations until fairly recently, but ignorance is not a legal defense and thus many collections, both public and private, now find themselves holding specimens the Federal government considers contraband. There is a legal cloud hovering over each and every arthropod collection in the United States that contains specimens collected from outside the country. The specimens involved surely total in the millions. It is a problem of huge proportion, the size of which has not been grasped at all by the U.S. Fish and Wildlife Service (USFWS) officials who have suddenly become diligent in enforcing these laws and regulations.

In a broad sense this situation develops from concern over endangered species, something all of us support. However, this concern over endangered species has been extended to the regulation of the taking of all wildlife, which in the United States is pretty much defined as anything possessing DNA. There are of course real problems with the U.S. Endangered Species Act (ESA) and the Convention on International Trade of Endangered Species (CITES), especially as insects and other invertebrates are added. But it is the regulations growing out of these documents that are causing the real problems. The Lacey Act Amendments of 1981 make it a crime to import or be in possession of wildlife exported illegally from another country or transported illegally within the United States.

To put it in a nutshell, what this means is if you smuggle ivory out of Kenya you are not home free if you get it into the United States. It is still illegal. This is admirable and obviously necessary to stem the tide of poaching of endangered species. But when it is extended to non-endangered insects, the potential problems seen obvious. And there is no provision made for scientific specimens.

There are about 120 countries listed by the USFWS as requiring wildlife collecting and/or export permits. Not all those countries require permits for insects, but some, perhaps many, do. It is the individual's responsibility to know what is required and to fulfill all of those requirements. (Note that these permits are probably required even for loans of material received for identification or research and which are

to be returned.) Here are some points I've gathered talking to USFWS officials and other scientists:

* Get everything in writing, even from USFWS officials, since even they often don't know all the details.
* Start early. Less developed countries usually have slower bureaucracies than do we. This pretty much means the end of "spur of the moment" trips.
* If you can't get a permit, **don't go**. Go to countries where permits are available.
* Don't believe what you are told in that country about permits not being needed unless the information comes from the agency recognized by the USFWS as competent to issue permits. Contact the USFWS or the Florida State Collection of Arthropods for a list of addresses of those agencies.
* When returning to the U.S. be sure to have your paperwork ready, including a Form 3177 Declaration for Importation or Exportation of Fish or Wildlife, which is required for **all** wildlife entering or leaving the U.S., even if other permits are not required. Contact the USFWS or FSCA for that form. (By the way, this form is even required for loans between museums.)
* To avoid delays at the airport, yuou should contact the USFWS ahead of time so an inspector will be available to examine your specimens.

Following the laws should keep you out of trouble on future collecting trips abroad, and there are many countries where permits are obtainable without exorbitant fees or unreasonable delays.

But what about specimens collected without permits since the Lacey Act went into effect in 1981? That's the real sticking point. There has been much discussion among collections officials over this subject, with calls for Congressional action to change the Lacey Act, Presidential action,etc. All of these ideas fly in the face of reality and the reality is that the vast majority of people, including lawmakers, are completely disinterested in the problems of insect collections.

The USFWS offers what it calls a "cleansing" process for collections that, with much trouble, will make illegal specimens into legal specimens. But it extends the process only to public collections. This must be unacceptable to the entomological community, since public collections depend on the support and good will of private collectors. The refusal to extend cleansing to private collections is a policy decision of the USFWS. This, I believe, is the one realistic avenue through which the problem of millions of contraband specimens can be resolved. If the cleansing process is extended to private collections, the entomological community would have the mechanism to resolve this enormous problem.

I recommend a letter-writing campaign to Secretary of the Interior Bruce Babbit. Explain the problem, explain the need to remove the legal cloud over **all** U.S. collections, suggest that the solution lies within the USFWS's own policies. **Copy the letter to your U.S. Representative or Senator or both.** This is important.

Some have recommended to me a course of non-action: "Let sleeping dogs lie." To mix metaphors (but stay in the same genus), this may keep the wolf from the door but there is no guarantee it will work and it is certainly no solution. A more appropriate quote may come from Benjamin Franklin and has to do with hanging separately or hanging together.

(**Ed. note:** Also from the Research Associate Newsletter of the Florida State Collection of Arthropods)

Mr. Carl Cook has recently published a forceful letter describing his concerns about the negative impact of the Lacey Act and restrictive legislation in other countries both scientific and avocational collecting of arthropods. He is spearhaeding an attempt, which we fully support, to improve the situation. Please write him at International Scientific Collectors Association, 469 Crailhope Road, Center, Kentucky 42214, USA.

U.S. FISH & WILDLIFE SERVICE AND THE LACEY ACT **JOHN B. HEPPNER**

(**Ed. note:** This article, from the Tropical Lepedoptera News, was reprinted with the author's permission. Dr. Heppner is a Taxonomic Entomologist employed by the Florida Dept. of Agriculture and Consumer Services and is also Editor of Tropical Lepidoptera.)

A future ATL newletter article will go into this subject in more detail, but a summary of current problems should be noted at this time, particularly for the interest of our members outside the USA. Events in 1993 have been brought about in large part due to the indictment of three collectors in California and Arizona on charges of poaching protected butterflies and larvae in U.S. national parks. This case prompted the USFWS in 1993 to become an aggressive bureaucracy in the search for illegal butterfly specimens, much as U.S. drug agents search for narcotics. In their zeal to protect endangered butterflies, illegal collecting, and all wildlife laws, both in the USA and elsewhere, the enforcements agents of the USFWS have taken an extremely strict and bureaucratic approach to U.S. wilflife laws, particularly the 1900 Lacey Act and its 1981 revisions.

Although basically well-meaning, agents of the USFWS have gone to extremes in their interpretation of the Lacey Act, even though the law specifically provides exemptions for dead specimens for scientific and museum study. The leadership at the USFWS, or the US Congress, will probably modify the rules of interpretation of the Lacey Act, since current enforcment activities are nearing the point of interfering with agricultural and medical research, as well as taxonomy and field studies involving insects and other animals and plants.

Much of the problem with such bureaucratic interpretation as witnessed now with the USFWS, stems from ignorance of insect biology and the lack of input from the scientific community during the lawmaking process. The efforts of various conservation organizations was largely behind revision in the Lacey Act, mainly involving the need to protect mammals, birds and other large animals, as well as plants. What typically is then done in such cases is to include all organisms, without knowledge of the ultimate effects of such laws. The reproductive biology of insects is so vastly different from mammals and birds, that moderate sampling of insects has never been shown to significantly affect any insect species; what has always caused the danger of possible extinction for insects is loss of habitat, not collecting. The only cases where insect species were endangered from collecting invovled species already on their last leg due to a reduce habitat, and overzealous collectors could eliminate a small local population in a restricted habitat.

The USFWS, in the investigation of the alleged poachers, also itself broke laws, by taking legally collected specimens from other collectors without search warrants, and engaging in such acts of intimidation as midnight visits to interrogate collectors and even nighttime swat team raids, much as is done in the case of heavily armed narcotics dealers. And, this involves butterfly collectors! Clearly, tactics are involved that are against the U.S. Constitution, such as illegal search and seizure.

The overzealous enforcement of parts of such laws as the Lacey Act in the USA has evolved now to the point that it requires a permit to do a scientific study of mosquitoes in some areas of the USA, yet it is perfectly acceptable to swat and spray the same mosquitoes by campers and other tourists (there are some extremely rare mosquito species, as well as common ones). The flawed bureaucracy can also be seen near the edge of lunacy in the USA, when the USFWS handles an illegally collected specimen, now in a museum, by prosecuting the "specimen" itself (!) and then depositing the seized specimen back to the same museum (this has happened in at least one case involving an eagle feather at a major museum in Illinois).

Needless to say, the USFWS enforcment agents remind us more and more of Nazi brownshirts, or the former Soviet KGB.

MISCELLANEOUS NEWS ITEMS

ANNUAL MEETING REMINDER: The annual meeting will be held at the Doyle Connor Building in Gainesville, Florida on 2-4 September . If you need further information contact Ron Gatrelle, 126 Wells Road, Goose Creek, SC 29445; ph. (803) 553-8817.

TEXAS FIELD MEETING: Ed Knudson has expressed an interest in hosting a field meeting, 1-2 Oct. 1994, at Neal's Lodge near Concan in the Texas Hill Country. This is a fabulous place for moths and a previous meeting there in May was a great success. Ed notes that this is a perfect time for Schinia and collecting sheets should be black with insects. Tropical butterflies also show up there at this time of year. Sounds like paradise to me! For more information contact Ed at (713) 464- 3529.
Neal's Lodge may be contacted at (210) 232- 6118 for reservation information. See you there!

The third issue of the News will contain an UPDATED MEMBERSHIP LIST. If you haven't mailed in your dues ($10.00) with any changes in your "interests" listing please do so soon.

Ron Gatrelle will be editing the News after this issue. Nobody has volunteered to do the job so Ron has decided to do it himself. Please submit any articles to him and don't be shy about it. The only way the Southern Lepidopterists' News works is if everyone participates. Please send zone reports to the designated zone coordinators. Jeff and I hope everyone has been happy with the News during our tenure. We tried to present a quality product. We would also like to thank Vernon Brou for maintaining a steady stream of articles for the News. Without these it would have been much less informative.

1993 TREASURER'S REPORT **TOM NEAL**

	BEGINNING BALANCE	BANK CHARGES	MEETING EXPENSES	POSTAGE	PRINTING	BANK DEPOSITS	ENDING BALANCE
J.	1675.12		38.50				1636.62
F.	1636.62						1636.62
M.	1636.62				295.10	155.00	1496.52
A.	1496.52						1496.52
M.	1496.52						1496.52
J.	1496.52					1080.00	2576.52
J.	2576.52						2576.52
A.	2576.52						2576.52
S.	2576.52				171.19	325.00	2730.33
O.	2730.33			107.31			2623.02
N.	2623.02						2623.02
D.	2623.02			262.58*	322.97*	560.00	2597.47
T.	1675.12		38.50	369.89	789.26	2120.00	2597.47

* These represent expenses for printing and mailing issues #3 and #4 of the News. Although they were paid in 1994 they are a 1993 obligation.

CURRENT ZONE REPORTS

ZONE I TEXAS: Ed Knudson, 8517 Burkhardt, Houston, TX 77055

Relatively mild winter conditions prevailed in SE Texas, but with no extreme warm or cold conditions. Emergences appeared to be 1½ to 2 weeks late, with the first Catocala appearing in early May at Beaumont.

Ed Knudson and Charles Bordelon Jr. continued the Lepidoptera survey of the Big Thicket area of east Texas. This includes Big Thicket National Preserve, for which they are building a reference collection and checklist. The preserve, which includes 8 separate units in SE Texas, is growing, and should exceed 100.000 acres before long. They have investigated 2 units so far: Turkey Creek (Hardin and Tyler Cos.) and Hickory Creek Savannah (Tyler Co.). In addition, they have also surveyed J. F. Kirby State Forest (Tyler Co.).

Collectors interested in visiting the Big Thicket area should be aware that BTNP is a National Park and no collecting of insects or other biological materials is allowed without a permit. Permits are also technically required for any and all public lands in the thicket (includes State Parks, State Management Areas, State Forest, National Forest, National Wildlife Refuge, etc.).

Interesting records so far this year include the following:
(KSF = Kirby State Forest, Village Creek = Turkey Creek Unit, BTNP Interpretive Center.) * = probable state record.

Incurvariidae: Adela caeruleella, KSF, 15 Apr.; Gelichiidae: Dichomeris mimensis, Village Cr., 16 Apr.; Sesiidae: Synanthedon rubrofascia*, N. Turkey Creek Unit, BTNP, 15 Mar. - 15 Apr.; Pyralidae: Phylctaenia leushneri*, Nephopterix crassifasciella*, Homosassa platella*, KSF, 15 and 16 Apr.; Noctuidae: Hypena ramstadti* (others collected in Beaumont by Bordelon), Village Cr., 19 Feb., Dysgonia consobrina*, KSF, 20 Mar.

Psaphida grandis, Village Cr., 19 Feb..

Mike Rickard joined Bordelon and Knudson for a day trip to Sabine Pass, Jefferson Co. on 8 May. Moths taken include Pero zalissaria and Doryodes bistrialis. The highlight of the trip, however, was the discovery, by Mike, of a late instar Automeris larva apparently feeding on sedge. Upon rearing, this turned out to be the first Texas (STATE) record for A. louisiana.

ZONE II ALABAMA, LOUISIANA, MISSISSIPPI, TENNESSEE: Vernon Brou, 74320 Jack Loyd Rd., Abita Springs, LA 70420; Bryant Mather, 213 Mt. Salus Drive, Clinton, MS 39056

No report.

ZONE III GEORGIA: Irving Finklestein, 425 Springdale Dr. NE, Atlanta, GA 30305

James Adams reports Ogdocontia cinereola to be common many months and also reports a probable STATE record for Stiria rugifrons taken on 11-VIII-93.

ZONE IV FLORIDA: Dave Baggett, 403 Oleander Drive, Palatka, FL 32077

The following reports were provided by Jeff Slotten.

On 10 April, 1994 members of the Tropical Lepidopterists' Society surveyed for moths and butterflies during the afternoon hours under sunny, warm conditions at Yankeetown, Levy Co.. The group consisted of Jeff Sloten, James Adams, Bill Russell, J. G. Filiatrault, Paul Milner, and Ann Milner. Visiting the blossoms of Erigeron quercifolius and Melilotus alba along the roadside were the following species: Syntomeida epilais jucundissima, Parrhasius m-album, Epargyreus clarus, Erynnis zarucco, Hylephila phyleus, Polites themistocles, Polites origines, Polites vibex, Atalopedes campestris, Euphyes pilatka, Poanes aaroni, Panoquina panoquin, Panoquina ocola, Papilio palamedes, Ascia monuste, Colias eurytheme, Mitoura gryneus sweadneri, Junonia coenia, Phyciodes phaon, and Danaus gilippus.

Also on 10 April, the group visited the oak barrens along SR-121 southwest of Williston and found conditions very dry with few flowers blooming. The following species were noted: Apantesis placentia larvae on young growth of Quercus incana, Hemileuca maia larvae on Quercus laevis, Hesperia attalus, Graphium marcellus adults and also larvae on Asimina sp..

The group then drove to Newnans Lake east of Gainesville, Alachua Co., and recorded the following: Hermeuptychia sosybius, Lethe portlandia. Papilio palamedes, Papilio glaucus, Asterocampa celtis alicia, and larvae of Xanthopastis timais on Hymenocallis crassifolia.

On 24-25 May 1994, Jeff Slotten, John Peacock, and John Kutis conducted a survey of moths at the Apalachicola Bluffs and Ravines Preserve of the Nature Conservancy, located in Liberty Co., Florida. All of the following records were of moths seen or taken on sheets illuminated with ultraviolet light.

1. Pholus achemon
2. Lapara coniferarum
3. Sphinx jasminearum
4. Darapsa pholus
5. Darapsa myron
6. Automeris io
7. Callosamia angulifera
8. Citheronia regalis
9. Eacles imperialis
10. Catocala ilia
11. Catocala amica
12. Catocala louiseae
13. Catocala alabamae
14. Catocala coccinata
15. Catocala connubialis
16. Catocala similis
17. Catocala mira
18. Catocala pretiosa
19. Catocala andromedae
20. Catocala grisatra
21. Catocala ultronia
22. Catocala sappho
23. Catocala epione
24. Catocala consors
25. Catocala grynea
26. Catocala jair
27. Catocala micronympha
28. Schizura species
29. Allotria elonympha
30. Dryocampa rubicunda
31. Antheraea polyphemus
32. Paonias myops
33. Paonias excaecatus
34. Cossula magnifica
35. Olceclostera angelica
36. Tolype minta?
37. Cisseps fulvicollis
38. Artace cribraria
39. Hypoprepia fucosa
40. Euerythra phasma
41. Grammia doris
42. Holomelina sp.
43. Acronicta betulae
44. Acronicta tritona
45. Acronicta exilis
46. Acronicta vinnula
47. Harrisimemna trisignata
48. Xanthopastis timais
49. Nedra ramosula
50. Agriopodes fallax
51. Perigea xanthioides
52. Eudryas grata
53. Oruza albocostaliata
54. Thioptera nigrofimbria
55. Nigetia formosalis
56. Lithacodia sp.
57. Cerma cerintha
58. Paectes abrostoloides
59. Paectes oculatrix
60. Comachara cadburyi
61. Baileya sp.
62. Synedoidea grandirena
63. Zale minerea
64. Argyrostrotis anilis
65. Diphtera festiva
66. Hyposorpha hormos
67. Hyposorpha monilis
68. Pangrapta decoralis
69. Bomolocha abalienalis
70. Bomolocha manalis
71. Bomolocha baltimoralis
72. Isogona tenuis
73. Furcula cinerea
74. Tegeticula yuccasella
75. Plagodis fervidaria
76. Nematocampa baggetti
77. Nepytia semiclusaria
78. Desmia funeralis
79. Pyrausta bicoloralis
80. Clydonopteron tecomae
81. Callima sp.
82. Acrolophus sp.
83. Conchylis oenotherana
84. Sparganothis lamberti
85. Choristoneura argentifasciata

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