Flea News  Volume 47

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FLEA NEWS is a biannual newsletter devoted to matters involving insects belonging to the order Siphonaptera (fleas). It is compiled and distributed free of charge by Robert E. and Joanne H. Lewis, with the support of the Department of Entomology at Iowa State University in Ames, IA and a grant in aid from the ZOECON CORPORATION, a Sandoz company based in Dallas, TX. It is mainly bibliographic in nature, but recipients are urged to check any citations given here before including them in publications. Many of our sources are abstracting journals and title pages and not all citations have been checked for accuracy. Additional information will be provided upon written request. Further, recipients are urged to contribute items of interest to the profession for inclusion herein.

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Shortly after mailing Flea News 46 we received word from Dr. Harry D. Pratt of the passing of Dr. N. E. Good, a victim of cancer. Following is a short obituary.

Newell Emanuel Good

31-December-1905 - 14-June-1993

Newell Good was born in Seneca county, near Bellvue, Ohio. He received the B. A. from Heidelberg College in Tiffin, Ohio, in 1927. He then pursued graduate training at George Washington University in Washington D.C. and was awarded the M. S. in 1929 and the Ph.D. in 1935, with a major in Zoology. His dissertation was entitled "The flour beetles of the genus Tribolium," and served as the basis for his USDA Technical Bulletin 498 (1936). From 1927 to

In 1946-1947 he served for 13 months with the United Nations Relief & Rehabilitation Administration in Fuzhou (Foochow), China, working on Bubonic Plague. From 1953 to 1968 he was the Medical Entomologist for the city of Philadelphia in the Philadelphia Department of Public Health. From 1968 to 1972 he served as the Regional Entomologist for several counties in the southeastern region of New York state for the New York State Department of Health. During this period he collected ticks north of metropolitan New York City and Long Island and evidently contracted one of the first cases of Lyme Disease, long before this illness was recognized as a distinct disease. He formally retired in March of 1972. The bulk of his personal papers were deposited in the Florida State Collection of Arthropods in Gainesville, FL.

During his professional career Good was a member of a number of professional organizations and authored or co-authored approximately 30 technical publications. His research interests centered on the taxonomy, distribution and ecology of mosquitoes and ectoparasitic arthropods and their vector relationships with pathogens.

Information presented here was derived from a number of sources and corroborated by Mrs. Virginia Good and Dr. H. D. Pratt.

**Flea Taxa Described by N. E. Good**

1939. *Oropsylla (Hubbardipsylla) oregonensis* Good & Prince

1939. *Oropsylla (Hubbardipsylla) washingtonensis* Good & Prince

1942b. *Carteretta clavata*

1942d. Miochaeta =*Stenistomera* Good

1942d. *Stenistomera macrodactyla*

**Flea Papers Authored by N. E. Good**


1942c. Key to the males of the genus *Atyphloceras* with a description of the male of *Atyphloceras echis* (Siphonaptera). Pan-Pacific Entomologist 18(2): 87-89, 1 fig.


I also have a copy of an unpublished, 22 page manuscript produced by Good about 1941 titled "Catalogue of the Siphonaptera or fleas, of Central America and northwestern South America".

**Recently Published:**

*Medical Insects and Arachnids.*


It is a melancholy fact that since the publication of the seventh edition of James and Harwood (1979), which is not being revised and is now out of print, there has been no textbook dealing with Medical Entomology suitable for use in an advanced class. Although not written for this purpose, the Lane and Crosskey volume could be used as such, but it is more detailed than are most general textbooks, and certainly more expensive.

The book consists of 19 chapters, plus an index to scientific names and a subject index. Chapters one and two, written by the editors, include a general introduction and an introduction to the arthropods, respectively. The remaining 17 chapters are grouped into three parts. Part One
consists of 10 chapters dealing with Diptera (flies) of medical importance. In addition to chapters on the major disease vectors, i.e. Culicidae (mosquitoes), Simuliidae (black flies), Ceratopogonidae (biting midges), Tabanidae (horse and deer flies) and Glossinidae (tsetse flies), there are chapters on blood-sucking Muscidae (stable and horn flies) and the calyptrate families in general, and flies causing myiasis in man. Part Two, entitled Other Insects, contains five chapters dealing with Blattaria (cockroaches), Hemiptera (kissing and bed bugs), Anoplura (sucking lice), Siphonaptera (fleas), and insect orders of minor importance. Part Three deals with arachnids and contains one chapter each on the Acari (ticks & mites) and the Aranae and Scorpiones (spiders and scorpions).

With some variation, most chapters dealing with specific groups follow a format including the following elements: Recognition and elements of structure; Classification and identification; Biology; Medical importance; Control; Collecting, preservation and rearing; and References. Due to delay in publication, most reference sections are only current to 1990, although a few sections include reference to 1991 and 1992 publications. The volume includes studies by 15 authors, all specialists in insects of medical importance.

This book is the most authoritative source available in the discipline and will certainly remain so well into the next millennium.

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Biology of the Heteromyidae.


This is the tenth in the Special Publications series of the American Society of Mammalogists and contains 18 chapters by 28 contributors. The first two chapters review the fossil history and taxonomy and systematics of these rodents, including the taxonomic history of the family and the classification and species accounts. The remaining chapters deal with such diverse aspects as anatomy, morphology, physiology, genetics, ontogeny and parasites, as well as a number of ecological studies. The chapter dealing with parasites (pp. 386-478) includes both endo- and ectoparasites. Although the authors point out that much work remains to be done before the parasite complex involving this family is fully understood, much is already known. For example, among the ectoparasites, heteromyids are known to host three genera of ticks, at least 16 genera of mites, excluding chiggers, at least 34 genera of chiggers and at least 31 genera of fleas. Though most of the latter genera are adventive, Meringis species are specific to Dipodomys, Wenzella species are specific to Heteromys, and Carteretta species are frequently associated with species of Perognathus.

Although of little interest to entomologists, this book contains a wealth of information about these interesting rodents. The chapters are all written by specialists and the data are presented in an easily readable format. The editors have done an excellent job of organizing the volume and it will probably be the authority on this group of mice for some time to come.
MISCELLANEA

Dr. Mathias Kiefer has requested that the following notice be included in this issue of Flea News.

The antiplague Institute in Stavropol is organizing a conference under the name "FLEAS", to be held in September/October, 1994, at the National Collection of fleas of the former USSR in that city. The official working languages are English and Russian, with translators available for the latter. Accommodations will be available at the Interhotel Kaukaz and International Hotels, with single rooms at approximately $30.00 US and doubles at approximately $50.00 US. Limited accommodations will be available at the Anti-plague Institute. Registration: ~ $50.00 US.

Additional information may be obtained by writing Dr. Kiefer at Westendstraße 79, 80339 München, Deutschland.

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The American Society of Parasitologists Newsletter 15(3): September, contained the following notice:

Dr. Annie K. Prestwood reports that The Flea Disc, an interactive vidiodisc on the developmental biology and control of fleas, has been completed. The videodisc contains two 10-12 minute videos as well as 150 slides of fleas, flea larvae, eggs, techniques for use in eliminating fleas from pets and from the environment, and slides of dogs and cats with flea-associated diseases. One video details the developmental biology of fleas and consists of videomicroscopy of fleas feeding, defecating, mating, depositing eggs, hatching of the eggs, and animation of various aspects of the life cycle and environmental forces that impinge upon it. The second video demonstrates methods for controlling fleas on the host, both in the home and in the outside environment. The videodisc and accompanying computer programs (PC-compatible and Mac versions) were designed as a stand-alone program for teaching this subject. Identification of fleas on cats and dogs, the flea life-cycle and developmental biology and flea-borne diseases of dogs and cats are covered in the tutorials, along with pre- and post tests. The videodisc and computer program are available from the Department of Parasitology, The University of Georgia, Athens, 30602 for $100.00. Discounts for more than one videodisc. A videotape (VHS or 8mm) entitled Developmental Biology and Control Strategies for Fleas is available for $25.00. The flea videodisc will be featured this fall on a new television weekly series called Pets, etc. that deals with veterinary medicine and pet care. The series was produced for Georgia Public Television, but will be made available to other public television stations in the near future.

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Dr. Emmett Easton of the University of Macau recently reported on his attendance at the III Congresso Ibérico de Parasitologia (Í Congresso Português de Parasitologia e VIII Congresso
Nacional Español de Parasitología) held in Lisboa, 4-8-October-1993. Following are the titles dealing with fleas.

**Osácar-Jiménez, J.J., J. Lucientes -Curdi & C. Calvete-Margolles.** Metodo de cria en el laboratorio de *Caenopsylla laptevi ibera* (Siphon-aptera: Leptopsyllidae).


**Feliu, C., M.S. Gomez, J. Torres, A. Arrizabalga & E. Montagud.** Sobre la parasitofauna de insectivoros y roedores en la Sierra de Gredos.

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The first International Congress of Vector Ecology, sponsored by the Society For Vector Ecology was held 3-8-October-1993 in San Diego, CA. The following presentations dealt with fleas:


**Yuval, B.** The vertebrate host as mating encounter site for its ectoparasites: Ecological and evolutionary considerations.

**Rust, M.K.** Future directions for flea control.

**Maupin, G.O. & K.L. Gage.** Plague surveillance in the western United States.

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**Dr. Eustorgio Méndez** has recently completed his book, *Los Roedores de Panamá*. It contains very useful information about all of the known species of Panamanian rodents, including excellent black and white drawings done by the author. It was published privately and sells for $27.50 US. Persons interested in obtaining a copy should contact Dr. Méndez at the Gorgas Memorial Laboratory, Apartado 6991, Panamá 5, Republica de Panamá.

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**Dr. John Linley** has recently examined the eggs of a few species of fleas using a scanning electron microscope. Flea eggs are not easy to find in nature since many species attach their eggs to the nesting material of the host and may be pigmented as well. As a result, his studies have been limited to a small number of taxa. Eggs should be preserved in Bouin's Fluid and even eggs dissected from gravid females are useful. Persons able to supply flea eggs should contact Dr. Linley at the Florida Medical Entomology Laboratory, 200 9th Street SE, Vero Beach, FL 32962 (407) 778 7200, or Dr. Allen Benton, 292 Water Street, Fredonia, NY 14063, (716) 679 0462.

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The following persons have sent reprints, etc. during 1993 for which we are most grateful. J.-C. Beaucournu, M. Blaski, J.R. Botelho, D. Cyprich, L. Durden, E. Easton, R. Eckerlin, K. Gage, T. Galloway, J. Greve, G. Haas, T. Hallas, I. Horak, J. Kucera, P. Linardi, H. Painter, R. Pilgrim, S. Tabor and Xie B.-q.

**Mailing List Changes**

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Mr. Michael Hastritter, 1955 East Oregon Avenue, Provo, UT 84606

Mr. James Kucera, 5930 S. Sultan Circle, Murray, UT 84107

Dr. James Noxon, 1726 Veterinary Medicine, Iowa State University, Ames, IA 50011

Mr. Juan José Osácar, Unidad de Parasitologia, Facultad de Veterinaria, c/ Miguel Servet, 177, 50013 Zaragosa, SPAIN

Dr. Judy Perdue, 1510 Buttermilk Rd., Cave Spring, GA 30124

Mr. Donald W. Pfitzer, 6732 Chaparral Drive, Lithonia, GA 30038

Dr. Helen Powers, 17480 Shelbourne Way, Los Gatos, CA 95030

Ms. Susan R. Ready, Department of Entomology, Texas A & M University, College Station, TX 77843-2475

Mr. G. C. Ritchie, 2719 Battery Terrace, Marietta, GA 30064,

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**SIPHONAPTERA LITERATURE**

Although it may not be obvious from the titles, citations included here pertain to fleas and the zoonoses associated with them. Additional information is available upon written request.

1986 (List 14)


1989 (List 10)

1990 (List 7)


1991 (List 6)


1992 (List 4)


Markowicz, S.B. Poisoning of an urban family due to misapplication of household organophosphate and carbamate pesticides. Clinical Toxicology 30(2): 295-303.

Rasnitsyn, A.P. Strashila incredibilis, a new enigmatic mecopteroid insect with possible siphonapteran affinities from the Upper Jurassic of Siberia. Psyche 99(3-4): 323-333.


1993 (List 2)

Babjaková, A., M. Krumpál & D. Cyprich. Occurrence of nonspecific fleas (S.) from the nests of sand martins (R.) in Slovakia. Tichodroma 5: 115-121.


McDonough, K.A., A.M. Barnes, T.J. Quan, J. Montenieri & S. Falkow. Mutation in the *pla* gene of *Yersinea pestis* alters the course of the plague bacillus-flea (Siphonaptera: Ceratophyllidae) interaction. *Journal of Medical Entomology* 30(4): 772-780.


It should be understood that all Russian and Chinese citations listed in this newsletter are in Russian or Chinese, although they may have summaries or abstracts in English, French or German.