

### THE ECDYSIAST

# Newsletter of the Crustacean Society

Ecdysiast Editor: Ray Bauer, Department of Biology, University of Southwestern Louisiana, Lafayette, LA 70504-2451, USA; telephone:318-231-6435, fax:318-231-5834

**ECDYSIAST VOLUME 12, NUMBER 2** 

NOVEMBER, 1993

### TCS MEETINGS IN LOS ANGELES, DEC. 26-30

Time grows short before the next TCS meetings, this year held in Los Angeles with the American Society of Zoologists (ASZ) and associated societies at the Los Angeles Hilton & Towers and Hyatt Regency Hotel, Dec. 26-30, 1993. ASZ handles the registration and general organization of the meetings; contact ASZ for this information if you are not a member (401 N. Michigan Ave., Chicago, Illinois, 60611; telephone 312-527-6697, fax 312-527-6640). Below is a is a preview of the TCS events at the meetings received from Program Officer Bob Elner:

#### TCS Symposia:

Dec. 27: "Phylogeny of and within the Maxillopoda" organized by Anne C. Cohen, Natural History Museum of L.A. County; presentations by G.A. Boxhall ("What defines the Maxillopoda"), L.G. Abele & T. Spears ("Molecular Phylogeny of Maxillopoda..."), F.R. Schram ("Some Fossil Maxillopodans..."), M.G. Grygier ("...Naupliar Features in the Maxillopoda"), P.G. Jensen ("...Lattice Organs in Thecostracan Larvae"), J. Hoeg ("...Phylogeny of Rhizocephala"), Rony Huys ("Tantulocarid Relationships..."), L.S. Kornicker and A.C. Cohen ("Phylogeny of the Myodocopa"), J. Vannier & K. Abe ("Lower Paleozoic Ostracoda..."), J.G. Morin, Summary.

<u>Dec. 28: "Biology of the Branchiopoda"</u> organized by Joel W. Martin, Natural History Museum of L.A. County.

"Physiology and Adaptation in Crayfish" organized by Brian R. McMahon, Dept. of Biological Sciences, University of Calgary. Note: This symposium is also sponsored by ASZ Divisions of Comparative Physiology and Invertebrate Zoology, as well as the International Association of Astacology.

### TCS Contributed Paper Sessions (with abbreviated titles of presentations):

Ecology and Distribution of Crustacea (J.L. King, Moderator): R.B.Griffis and D.L.Felder, Effects of burrowing shrimp; J.M.Levy et al., Macroalgal crustacean infaunal diversity; H.G. Kuck and J.W.

4 . . .

Martin, Decapods and Stomatopods of Isla de Coco; J.L. King et al., Crustacean communities of vernal pools; J.M. O'Brien et al., Salinity-temperature effects on crab-rhizocephalan interaction.

Phylogeny and Taxonomy of Crustacea (A. Baldinger, Moderator): E. Torres et al., Phylogeny of luminescent ostracodes; M.L. Powell et al., Identification of Penaeus postlarvae; G.A. Pettit et al., New caprellid species; A. Baldinger, Systematics of Arcitalitrus.

Physiology and Morphology of Crustacea (R.T. Bauer, Moderator): K. Abe and J. Vannier, Myodocopid heart; R.T. Bauer and Lin Jun Min, Spermatophores and mating plug of Trachypenaeus, S.S. Kumari and D.M. Skinner, Exoskeletal glycoproteins of Gecarcinus; D.L. Felder and B.E. Felgenhauer, Fungal symbionts in ghost shrimp hindgut; L.Q. Chen et al., Soybean diet for Eriocheir.

#### Poster Session:

F.H. Barnwell and J. Martini, Activity rhythms of *Uca tangeri*; B.C. Bauer et al., Ion balance in fairy shrimp; K.H.Chu et al., Larval swimming in *Metapenaeus*; C.E. Esparza et al., Computerized key to fairy shrimp; S.L. Gilchrist, Hermit crab shell use; M. Heddle and S.L. Gilchrist, *Coenobita clypeatus*; J.W. Martin and C.E. Cash-Clark, Redescription of the "cladoceran" *Bythotrephes*; C.L. McKenney, Jr. and D.M. Celestial, Insect juvenile hormone effect on crustacean larvae; C.L. Morrison, Geminate species of *Synalpheus*, D. Parsick et al., Eubranchiopod communities; W. Werner and S. Hathaway, Postembryonic development of two new branchiopod species.

#### TCS Board and Business Meetings:

The TCS Board of Governors meeting will be conducted from 4-6 p.m. on Dec. 28 and the general meeting of the TCS membership will be the following day, Dec. 29, from 5:30-6:30 p.m.

#### MORE ON TCS MEETING ACTIVITIES

The following comes to us from Jody Martin:

Crustacean Biodiversity Workshop: This will be held Dec. 29 at the Natural History Museum of Los Angeles County (Times-Mirror Room) from 1-5 p.m. and will include a brief tour of the Museum.

TCS Dinner: The TCS dinner is planned for Wednesday (Dec. 29) evening at "La Golondrina Cafe and Historic Landmark." Located on historic Olvera St. in the heart of old Los Angeles, this Mexican restaurant offers a buffet-style dinner with live music daily. Olvera Street offers a glimpse of the original pueblo community that evolved into present-day Los Angeles and is a cultural and historical landmark.

INTERNATIONAL ELECTRONIC DISCUSSION GROUP ON SHELLFISH Bob Elner sends information on an electronic forum (SHELLFISH), started by the National Shell Fisheries Association (NSA), for the discussion of all issues relating to shellfish. It operates using electronic mail, using Internet, the international computing network which connects academic institutions and most federal and other nonprofit institutions. Access to the Internet and this discussion group is free, operates throughout the year, and TCS members are free to participate. Once you are subscribed, you will be able to make an inquiry to the group and get feedback from all over the world, sometimes within minutes. To subscribe to SHELLFISH, send electronic mail from your own computing account via your local computing service center to the following Internet address: SHELLFISH-EQUEST@KENYON. The body of the electronic mail should contain only one word: SUBSCRIBE followed by your real name rather than your username. programs that manage the discussion group will determine where this subscription came from and will automatically add you to the list of participants if you are a current member of either TCS or NSA. Once your request has been processed, you will receive via electronic mail the instructions on how to participate in the discussion group. If you have questions on how to send the subscription command, contact your local computing support people first. Direct questions about the discussion group to either Bob Elner (phone 606-946-8546) or Scott Siddall (614-427-56960 or send e-mail to SIDDALL@KENYON.EDU.

ALLAN HANCOCK CRUSTACEA NOW AT NATURAL HISTORY MUSEUM, L.A. COUNTY
Jody Martin submits the following information: By a formal agreement
between the University of Southern California and Los Angeles County
dated 1985, ownership of all crustacean specimens that were formerly
held by the Allan Hancock Foundation on the campus of the University
of Southern California was transferred to the Natural History Museum
of Los Angeles County. This collection includes the world's largest
holdings on Eastern Pacific crustaceans, especially decapods, as well
as many smaller collections from around the world. There are an
estimated 120,000 lots, including over 1,500 type lots, over 450 of
which are holotypes. There are nearly 5,500 type specimens. The
collection is the second largest collection of Crustacea in the U.S.

The type lots and general collections of peracarids, stomatopods, branchiopods, maxillipods, and most of the caridean and penaeid shrimps have been physically transferred from the Allan Hancock Foundation to the Natural History Museum, whereas the Anomura and Brachyura will be transferred by the end of 1995. During this transition, the collections will remain available for examination and loan. We encourage specialists to visit and work with the collections. We anticipate having modest funds in 1994 and 1995 to support limited travel to the museum to assist with systematic arrangement of parts of the collection.

Dr. John S. Garth and Ms. Janet Haig, although officially retired, continue to actively work on these collections and can be reached by writing the Allan Hancock Foundation or the Natural History Museum, where they are Research Associates in Invertebrate Zoology. Please direct all queries to Hans G. Kuck (Collections Manager) or Joel W. Martin (Curator), Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, California, 90007 USA

FOURTH INTERNATIONAL WORKSHOP ON LOBSTER BIOLOGY AND MANAGEMENT Dr. Gerry Ennis, Department of Fisheries & Oceans, St. John's, Newfoundland, sends us the following report on these lobster meetings: "A well attended (nearly 100 participants from 21 countries) and very successful Fourth Interantional Workshop on Lobster Biology and Management took place July 25-31, 1993 at the School of Fisheries Science of Kitasato University in Sanriku, Japan. Over 80 presentations on various species of spiny, rock, clawed and slipper lobsters were organized into sessions on recruitment, physiology, aquaculture, restocking and population dynamics. An excellent social program was included and participants were treated to some wonderful Japanese hospitality. Great credit is due Professor Jiro Kittaka and his committee for making the workshop a truly memorable event for all.

#### ANOSTRACAN NEWSLETTER

Denton Belk has begun publication of "Anostracan News" (Volume 1, Issue 1, July 1993). The first issue dealt with various subjects of interest, such as establishment of a Specialist Group for the Anostraca for the Species Survival Commission, IUCN- World Conservation Union and the distribution and status of Italian Anostraca. If you wish to be on the mailing list for this newsletter, list your publications on Anostraca, or have information for the newsletter, contact editor Denton Belk, 840 E. Mulberry Ave., San Antonio, Texas, 78212-3194; phone and fax: 210-732-8809.

#### CRUSTACEAN LARVAE NEWSLETTER

Zoea is a newsletter intended for all workers interested in crustacean larval development. The newsletter will serve as a forum to share results, to exchange ideas, and to report successes and failures. Interested crustacean biologists are encouraged to send us addresses for the mailing list, short articles for publication, items of interest, recent (1992-) publications, and suggestions for important topics to consider. Publication of the newsletter will begin in January 1994. The address of the editors are: J.A. Cuesta (Departamento de Ecología) and J.I. González Gordillo (Laboratorio de Biología Marina), Facultad de Biología, Apartado 1095, E-41080, Sevilla, Spain.

#### PLANKTON NEWSLETTER

The plankton newsletter is a biannual journal focussing on the study of marine plankton. Each volume is dedicated to a particular group of planktonic organisms and publishes a directory of scientists working on that group and a list of recent literature. The newsletter character is expressed by short communications on recent research (pre-publication), theories and ideas, sampling equipment, information on conferences and workshops, and letters to the editors on subjects in planktonology. The date of publication of the last newsletter was to be July 1993 and the subject is the marine Decapoda. Please send or fax your correspondence or inquiries to the editors M. van Couwelaar and S. van der Spoel, P.O. Box 16915, 1001 RK Amsterdam, The Netherlands; fax 31.20.5257238.

NEWSLETTER OF CRUSTACEAN MOLECULAR TECHNIQUES (NewCruMolT)
As one might expect from this newsletter's title, topics such as "PCR primers for the COI gene in barnacle mtDNA, Don't be cheap about primers, the D-loop of barnacles, molecular phylogeny of predatory Cladocera, Chelex extraction of crustacean DNA from frozen and alcohol-preserved samples, DNA extraction from Daphnia" and other similar topics are covered in "NewCruMolt." The fall issue (1993) is dedicated to DNA sequencing techniques and ecological/evolutionary applications. Send your items (e-mail greatly appreciated) to the editor, Ann Bucklin, OPAL/EOS, 142 Morse Hall, Univ. New Hampshire, Durham NH 03824. (fax 603-862-0122, OMNET A. BUCKLIN, e-mail: a-bucklin@unhh.unh.edu).

#### CRAB NEWSLETTER

Dr. Glen S. Jamieson, Pacific Biological Station, Nanaimo, B.C., Canada V9R 5K6, proposes a newsletter dealing with crabs, especially in terms of research on crab fisheries and management. He views the main objectives of such a newsletter as encouraging information exchange, establishing greater awareness of controversial subjects and research initiatives, and strengthening crab research by allowing rapid dissemination of information relating to upcoming articles and events. A crab newsletter will be relevant to both professionals involved in crab research and management and to crab fishers interested in events which might influence their livelihood. Proposed headings in a crab newsletter might be: Recent Events, Research News, Fisheries Updates, Announcements, Perspective, New Methods and Applications, Book Reviews, Letters. Those interested in the development of such a newsletter should write Dr. Jamieson at the address given above.

#### SOME NEW PUBLICATIONS IN CARCINOLOGY

Ray Manning sends the following information on some new works in Crustacea:

Résultats des Campagnes Musorstom, Volume 10: Alain Crossnier, editor: This volume contains 9 contributions on the taxonomy and biogeography of crustaceans, recording a total of 159 species of Mysidacea, Amphipoda, Decapoda. Of these, no less than 72 are new to science, as are 12 genera. These figures confirm the stunning uniqueness of the bathyal fauna of this part of the world. addition to these zoological papers, this volume contains 3 other contributions: a report on the Musorstom 7 expedition to Wallis and Futuna (South Pacific); station lists of various sampling programs around New Caledonia since May 1989; and a list of 276 bibliographical references to papers reporting results of the exploratory cruises on the bathyal and abyssal fauna of the New Caledonia region. The MUSORSTOM series is a joint program of the Muséum national d'Histoire naturelle and the Institut Français de recherche Scientifique pour le Développement en Coopération (ORSTOM). The price of this volume is 560 French francs; write Éditions du Muséum, 57 Rue Cuvier, 75005 Paris

Ph.F. von Siebold and Natural History of Japan, Crustacea: T. Yamaguchi, editor. This volume contains articles by T. Yamaguchi, K. Baba, and L. Holthuis on the specimens collected by von Siebold and H. B rger and their museum depositories, a list of species described, contributions of the Crustacea volume of the Fauna Japonica, as well as other pertinent information. The cost is \$70 (personal) or \$100 (institutional). The volume can be obtained from T. Yamaguchi, Aitsu Marine Biological Station, 6061 Aitsu, Matsusuma-machi, Amakusa 861-61, Japan. Remittance should be made to "Siebold kenkyu-kankokai" at P.O. Savings Transfer Account 5-20805 Kumamoto (bank check will also be accepted).

## PLEASE, SEND IN THOSE ITEMS OF INTEREST TO SOCIETY MEMBERS TO THE ECDYSIAST!!

Your TCS newsletter is a forum for transmission of information, opinion, news, ideas etc. etc. among Society members. Please send mail or fax those items in to Ray Bauer, *Ecdysiast* editor, Department of Biology, University of Southwestern Louisiana, Lafayette, LA 70504-2451, USA; telephone:318-231-6435, fax:318-231-5834



# INTERNATIONAL ASSOCIATION OF ASTACOLOGY I.A.A.

Secretariat P.O. Box 44650

University of Southwestern Louisiana Lafayette, Louisiana 70504 U.S.A.

#### PUBLICATION ANNOUNCEMENT

FOR IMMEDIATE RELEASE - OCTOBER 1993

THE INTERNATIONAL ASSOCIATION OF ASTACOLOGY WISHES TO ANNOUNCE THE PUBLICATION OF FRESHWATER CRAYFISH, A JOURNAL OF ASTACOLOGY, VOLUME IX.

EDITED BY DAVID M. HOLDICH AND G. F. WARNER, THE VOLUME INCLUDES 52 TECHNICAL PAPERS ON MANY DIFFERENT ASPECTS OF CRAYFISH BIOLOGY INCLUDING:

- I. CRAYFISH AQUACULTURE AND NATURAL RESOURCES
- II. PHYSIOLOGY, ECOTOXICOLOGY & BIOCHEMISTRY

III. DISEASES

- IV. ECOLOGY, DISTRIBUTION, CONSERVATION & BEHAVIOUR
- V. GROWTH, MOULTING & REPRODUCTION

ORDERING INFORMATION FOLLOWS. PAYMENT MUST BE IN U.S. DOLLARS FOR CHECKS DRAWN ON U.S. BANKS OR OFFICIAL BANK CHECKS DRAWN ON U.S. BANKS (OFFICIAL BANK CHECKS INCLUDE ROUTING CODES ON THE BOTTOM MARGINS). IAA SINCERELY REGRETS THAT IT CANNOT ACCEPT CREDIT CARD PAYMENT.

COST IS \$25.00 U.S. DOLLARS PER BOOK. POSTAGE AND HANDLING CHARGES ARE:

U.S.A. SUS 3.00

OVERSEAS SURFACE \$US 4.00

OVERSEAS AIR \$US 14.00

DIRECT ORDERS TO:

SECRETARIAT
INTERNATIONAL ASSOCIATION OF ASTACOLOGY
UNIVERSITY OF SOUTHWESTERN LOUISIANA
P. O. BOX 44650
LAFAYETTE, LOUISIANA 70504
USA

TEL. 318-231-5239 FAX. 318-231-5395

Jay Huner President Lafayette, Louisiana USA Jostein Skurdal President Elect Lillehammar Norway 7

Paula Henttonen
Secretary / Treasurer
.- Kuopio
Finland

David Holdich Past-President Nottingham England

Edited by D. M. Holdich & G. F. Warner		
		ì
International Association of Astacology Bytaws		s 3
Participants at the 9th International Symposium The 4th Shire Abrahamson Memodel I actions		#FXM
A review of world crustacean aquaculture withspecial reference to crayfish.	Alsh.	1-12
I. CRAYFISH AQUACULTURE & NATURAL RESOURCES		
McClain, W.R., Boilich, P.K. Relaying: a means to increase market size of <i>Procambans clarkii</i> and B. Huffman, D.C. Increases not external from designations and designations and the control of the cont		13-17
Whaley, M.H. & Eversole, A.G. Enterston of the crayflath season by detaying harvests and supplementalleeding 16-27 Huner, J.V. Huner, J.V. Secovery of edible probles from sommon North American converses.	feeding Att	18-27
	2	2
O'Nell, D.J., Franch, D.P., Chelse removal alter attainment of exual maturity in male <i>Procambarus</i> Rebech, 8. & Harwerker, T.S. <i>ctarkii</i> (Grand) and mortali with menum.		38-49
	氰	99-09
In communal culture ponds.  Geddes, M.C., Smalfridge, M. The effect of stocking density, food type and shallers on sundyst and		8
_		<b>B</b>
		87-02
Cydemo, H. & Westin, L. Effects of starvation, constant fight and partial decytotomy on survival of noble carefully. Astacha entering it includes both december to constitute.		29-66
The development of a Pacifastacus tentusculus population in a gravel pit in		87-98
France.  Development of a <i>Astacus astacus</i> population in Lake Bronnen - a amati		97.1m
gravel lake in Bavarla, Germany.		
		101-117
Skurbal, J., Oveniki, T., Long term study of exploitation, yield and stock structure of noble crayfish Taudbel. T. & Gâmas. E. Address services in the Colonial Colon		116-133
	76	49.4.4.5
Soricanez, J., Cartal, J.M., Management of crayfish eggs (Pacitastacus lentusculus) Celada, J.D., Sáez-Royuela, for intensification of juvenile production. M., Gaudioso, V.R., Femández,	<u> </u>	144-146
H. & Lopez-Basson, C. Reymolds, J.D. & Experimental fishing of Austropotamobias natifices (I arehmitted in the second in the		637 469
Matthews, M.A. an Irish midlands take. Discuss S. Roler A. Mandes A. A. Mandes A. Mandes S. Roler S. Roler A. Mandes		3
2	\$	154-157
Carrat, J.M., Celada, J.D., Wild freetwater crayfish populations in Spain: González, J., Sáez-Royuela, current status and perspectives. M., Gaudioso, V.R., Fernández, R. &	\$\$.	158-162
Α,	Ş	
	\$ 5	170-173
II. PHYSIOLOGY, ECOTOXICOLOGY & BIOCHEMISTRY 27, 8.R. & Respiratory adaptations in burrowing crayllah. 30, J.J.	174-182	-182
Respiration during posternbyonic development of the freshwater crayfish	183-188	188
Whiteley, N.M., Taytor, E.W. Seasonal 2nd moult related changes in haemolymph oxygen and acid-base	Se 189-199	<del>1</del> 99
	led 200-212	212
Ion fluxes in the freshwater crayfish, Procembarus clarkii (Grand).  1AA Newsletter 14 (4): 6		

Musgrove, R.J.	Frame and sha in hands restales Annes destructed.	
1 - T- T- C - T- T- C	(Paratacidae).	213-223
Baccou, JC. & Serveire, Y.	Biochemical study of the growth of Astacus leptodacty/us Eschecholtz fed	226-234
Syroklene, J. &	The activity of gui bacteria of the crayfish, Pacifistacus ferbusculus (Dana).	235-240
Mickensene, L.	In producing essential free arritro acida.	
Foster, J. & Terner, C.M.	Incititing Studies on three species of freshwate rorayish.	241-248
	Austropolamobile passpee (Lerabouses): elevated ammonia and reduced	249-236
Burba, A.	dissolved oxygen concentrations. Investigation of the effects of entirences of feature as a control to the	
	reading.	22-522
III. DISEASES		
Nytund, V., Kirjavalnen, J.,	Caylish pague in Britain, the first twelve years. The soread of cravitah cleans (Anhannimse setach and its seasons	266-272
Tulonen, J. & Westman, K	the noble crayfish (Astacus astacus) population in the Lake Ornajard	2/3-2/8
Cerenius, L. & Söderhäll, K.	waterway in Financi in 1988-1991. The distribution of <i>Psorospermitran heactes</i> in Swaden: a realiminary as the	
Diéguez-Urbeondo, J., Pinedo-Rutz, J., Cerenius, L. & Söderhäll, K.	Presence of Psonspermium hasotel in a Spanish population of Pacifastacus fenusculus.	286-268
IV. ECOLOGY, DISTR	IV. ECOLOGY, DISTRIBUTION, CONSERVATION & REHAVIOUS	
Matthews, M.A., Reynolds,	Macrophyte reduction and benthic community alteration by the craylish	286.200
J.D. & Kestinge, M.J. Fremale A G & Eats 1 W	Austropolamobius patitipes (Lerebourier).	,
Hessen, D.O., Christlensen,	retural relationships of two chaylish species in a mountain stream. Nutrient release from chaylish, and its malantal inners on prime.	300-310
G. & Standal, J.	production in lakes.	1215
DISKS, W.A. & HBR, P.J.B.	Habitat preferences and survival of juvenile signal craylish, Pacifiastacus fentuaribre, the tribiance of survival contracts.	316-332
;	gravid female crayfish.	<del>(************************************</del>
Svensson, M.	Predation by perch, Perce Rivialitie (L.), and roach, Further nuthus (L.),	333-344
Foster, J.	The relationship between refuge size and body size in the creationship	246 346
Coffee W & 6 Bades	Austropotamobius palitipes (Lereboullet).	2
Sellien, N.A. & Derton, U.K.	Impriic ecology of Orconectes propingues in Georgian Bay (Ontario, Canada).	350-358
Ihéu, M. & Bernardo, M.	Experimental evaluation of food preferences of red awamp craylish,	359-364
Slater, F.M. & Rayner, G.	Procampans darkt: vegetal versus animal. Austropolambhis palifica in other stat in the mid you.	
	Central Wales.	365-367
Geodes, M.C., Musgrove, R.J. & Carrobell, N.J.H.	The least-billy of re-establishing the River Murray crayfish, Euastacus Armatus, in the hume River Muses.	368-379
Laurent, P.J., Moolas, J.,	Five years of action in Lorraine and Morvan (France) to restore the	380-389
a rans, L. Troschel, H.J. & Dehus, P.	Note Calylet, Astacus astacus. Distribution of candish enables in the Endows of	
# C children	with epecial reference to Austropotamobias palipes.	390-398
	Evaluation of the burrowing behaviour of stream and pond dwelling species of Orconecies in the Front Rance of Boulder Colorado 1929, their	399-406
Haslotis. S.T.	ethological and geological implications.	
•	an overview of burrowing behaviour and morphology as reflected by their	407-418
Wiles PR & Gran R 7	Burrow morphologies in the geological record.	
	crows on a new memod for permanently lagging crayfish with microchip implants.	419-425
V. GROWTH, MOULTIN	V. GROWTH, MOULTING & REPRODUCTION	
Lindqvist, O.V., Hentlonen, L.	moduling, growin; survival and colour of Astacus astacus (L.) tuveniles fed diets with and without green plant material and maintained in individual	428-441
Correla, A.M.	Crawleh	
Westman, K., Savolainen, R.		064-7420
	B)	451-465

### CRUSTACEAN ISSUES

- 1 Crustacean Phylogeny 1983, 365 pp., Hfl.230/\$130
- 5 Barnacle Biology 1987, 364 pp., Hfl.230/\$130
- 2 Crustacean Growth:

  Larval Growth

  1985, 247 pp., Hfl.205/\$120
- 6 Functional morphology of feeding & grooming in Crustacea 1989, 240 pp., Hfl.205/\$120
- 3 Crustacean Growth:
  Factors in Adult Growth
  1985, 375 pp., Hfl.230/\$130
- 7 Crustacean Egg Production 1991, 412 pp., Hfl.195/\$11 5

#### <u>NEW</u>

- 4 Crustacean Biogeography 1986, 303 pp., Hfl.205,/\$120
- 8 History of Carcinology 1993, =500 pp., Hfl.205/\$120

A.A. Balkema Publ., P.O. Box 1675, 3000B	R Rotterdam, Netherland [fax:(31.10)4135947] or		
A.A. Balkema, Old Post Road, Brookfield, VT 05036 [fax:(802)276-3867]			
Please send me the following book(s):			
·			
Name:			
Address:			
City & postal code			
Postage will not be charged if payment enclosed with a			
Customers from within the EC will be charged 6% Dutch	h VAT on books. Firms and institutions that have a VAT		
identification number will be zero charged (0% VAT) if t			
VAT No.:			
I enclose:	Payment was made in Hfl. through the Post Office:		
° personal check in US\$ or £, or Eurocheque in Hfl.	° On Dutch giro account 27.79.202		
° bank draft drawn on a bank in USA (\$) or UK (£)	° On German giro account Ffm 300583-602		
Please charge my credit card: American Express/ Eur	ocard/ Diners Club/ Master Card/ VISA/ Access.		
Card Number			
Date:	Signature:		

.