PHYCOLOGICAL NEWSLETTER

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2008 Meeting of The Phycological Society of America New Orleand, Louisiana, USA 27-30 July

Deadline for contributions

he Phycological Society of America (PSA) will hold its 2008 annual meeting on July 27-30, 2008 in New Orleans, Louisiana, USA. The meeting will be held on the campus of Loyola University and is being hosted by Prof. James Wee (Loyola University). The meeting will kick-off with an opening mixer on the evening of Sunday, 27 July and the scientific program will be Monday through Wednesday, 28-30 July. The PSA banquet will be Wednesday evening at the Louisiana Swamp Exhibit at the Audubon Zoo. Optional field trips are planned before the meeting and a work day with Habitat for Humanity is being explored for the day after the meeting. Low-cost dormitory accommodations will be available on the Loyola campus. Room blocks have also been reserved at two nearby hotels.

Continuing with the new meeting format begun in 2006, PSA will again sponsor Plenary talks and associated mini-symposia with participants identified by the Plenary speakers. Contributed papers related to the mini-symposia topics will be solicited and scheduled in "featured contributed talk" sessions immediately following each mini-symposium.

The Plenary Speakers and session topics for 2008 are:

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Editor:

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*Dr. Karen Steidinger (Florida Fish and Wildlife Research Institute) presenting a plenary talk entitled "Harmful algal blooms in North America: Common risks." The associated mini-symposium speakers will be Dr. Leanne Flewelling (Florida Fish and Wildlife Research Institute) presenting a talk entitled "Unexpected vectors of brevetoxins to marine mammals" and Dr. Jonathan Deeds (US FDA Center for Food Safety and Applied Nutrition) presenting a talk entitled "The evolving story of Gyrodinium galatheanum = Karlodinium micrum = Karlodinium veneficum. A tenyear perspective."

*Dr. John W. Day (Louisiana State University) headlining a session on the ecology and management of coastal and wetland ecosystems, particularly in the Mississippi Delta region in the aftermath of major hurricanes. Dr. Day will present a talk entitled "Climate change, energy scarcity, and sustainable management of the Mississippi delta." One of the associated mini-symposium speakers will be Dr. Sibel Bargu (Louisiana State University) presenting a talk entitled "Harmful Algal Blooms (HABs) and their impact on Marine Environments in the Northern Gulf of Mexico," and Dr. Paul Kemp (Vice-President, Gulf Coast Initiative National Audubon Society) presenting a talk on the ecological implications of wetland

restoration and flood protection.

*Dr. Bill Barclay (Martek Biosciences Corporation) will headline a session on algal biotechnology and present an address entitled "Commercial production of highly unsaturated fatty acids by microalgae: Lessons for biofuels production." The associated mini-symposium speakers will be Dr. Craig Weaver (Martek Biosciences) presenting a talk entitled "Manipulation of Schizochytrium genes for improved fatty acid production" and Dr. Casey Lippmeier (Martek Biosciences) presenting a talk entitled "Schizochytrium as a viable production platform for biotechnology."

7th International Chrysophyte Symposium Connecticut College June 22-27, 2008 New London, Connecticut, U.S.A.

Tentative Keynote and Mini-Symposia Schedule

his is a reminder notice that plans continue to move forward for this year's International Chrysophyte Symposium. We've heard from many of you and anticipate a great crowd and an exciting series of talks. Listed below are the keynote talks and tentative minisymposia speakers. In addition, we'll have open sessions each day for the presentations and posters that we hope many of you will present. Please check our conference website for regular updates

http://www.conncoll.edu/academics/departments/botany/ICS.html

Sunday, June 22nd Arrival & Registration

Monday, June 23rd Keynote Presentation: Andrew Knoll, Harvard Uni-

- versity. Topic: "Early Evolution of Eukaryotes"
 Minisymposium: Paleolimnology (Christian Kamenik, convener)
- -Sergi Pla (Loughborough Univ.) Paleoclimatology with a focus on the Pyrenees
- -Andrew Paterson (Ontario) Improving Lake management: Linking the Past & Present
- -Jordi Catalan (Univ. Barcelona), tentative Climate Reconstruction
- -Peter Siver (Connecticut College) Chrysophytes in the Eocene

Tuesday, June 24th

Keynote Presentation: Mitch Sogin, Marine Biological Laboratory, Woods Hole. Topic: Microbial Population Structure of the World's Oceans: an underexplored "rare biosphere" Minisymposium: Evolution of Heterokonts (Robert Andersen, convener)

- -Rose Ann Cattolico (University of Washington) New perspectives on stramenopile chloroplast genome
- -Robert Andersen (Bigelow Laboratory for Ocean Sciences) Heterokont algal phylogenies derived from multigene analyses.
- -Hwan Su Yoon (Bigelow Laboratory for Ocean Sciences) Molecular evolution of the brown algae and kelps
- -J. Craig Bailey (University of North Carolina Wilmington) Plastids and colorless stramenopiles: implications for the origin of heterokont algae

Stom@ocyst WIKI workshop led by Christian Kamenik Other Workshops are still being planned

Wednesday, June 25th

Taste & Odor Workshop- The Senses of Taste and Smell, and Water

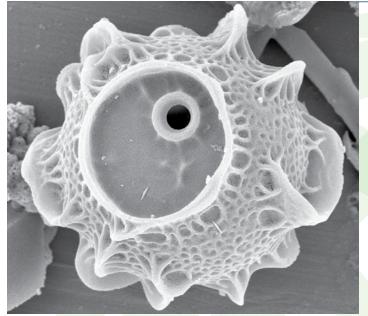
Gary Burlingame, Philadelphia Water Supply

Thursday, June 26th

Keynote Presentation: James Rohlf, SUNY-Stony Broo. Topic: "Use of Geometric Morphometrics in Biology" Minisymposium: Signals & Smells: Chemical Ecology &Taste and Odor (Sue Watson, convener)

- -Sue Watson (National Water Research Institute, Burlington, Canada) Chrysophyceae & Other Taxa: Signals & Smells in Drinking Water and Foodwebs
- -Gary Burlingame (Philadelphia Water Supply) The Case of the Cucumber Flower
- T-homas Wichard (Princeton) Chemical Signals & Harmful Algal Blooms
- -David Domozych (Skidmore College) tentative title, Didymosphenia geminata: Invasive or Opportunist?

We look forward to seeing you in June!



"Eocene Chrysophyte Cyst" taken by P.A. Siver

The Fifth Asian Pacific Phycological Forum November 10-14, 2008 Wellington, New Zealand

he Fifth Asian Pacific Phycological Forum will be held on November 10-14, 2008 in Wellington, New Zealand.

This meeting is jointly sponsored by the APPA (Asian Pacific Phycology Association) and ASPAB (Australasian Society for Phycology and Aquatic Botany), and local organizations (NIWA and VUW). The web page is up and running at www.appf2008.com

and a flier is downloadable from this site. Please circulate it to all your students and associates. Various mini-symposia are scheduled (see web site), as are workshops.

This is the first international phycological meeting in New Zealand.

A call for papers and registration details will be announced in January 2008, with registration/abstract due about May/June. The page will be updated as information becomes available.

Please book this exciting meeting at this great site into your calendar.

We look forward to seeing many of you!

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ISAP 2008 June 21-27 Galway, Ireland

he 3rd Congress of the International Society for Applied Phycology and the 11th International Conference on Applied Phycology will be held at the National University of Ireland, Galway 21st to 27th of June 2008 and will be hosted by the Martin Ryan Institute, National University of Ireland, Galway.

Since the early 19th century, when scientific investigations of Irish marine algae began in earnest with William Henry Harvey (1811-1866), over 600 different species of seaweed from Irish waters have been identified. Given the small area of the island, this is a very high biodiversity. No wonder as Ireland has an extensive coastline of about 7,500 km and a north-south span of almost 4 degrees of latitude. Seawater temperature range from 6-8 °C in February and from 15-16 °C in August and the mean range of spring tides varies from 2.2-4.5 m (Marine Institute 2002).

Seaweed harvesting is an ancient tradition in Ireland and the usage of dulse for food (Palmaria palmata) in Ireland first appears in a stanza of a poem now thought to be 12th century (Ó Madagáin 1994). Other edible species that have traditionally been harvested are Chondrus crispus and Mastocarpus stellatus (carrageen), and Porphyra species (laver). Different types of fucoids and kelps have been used as fertilizer by coastal dwellers for hundreds of years. During Ireland's potato famines of the 19th century, many communities were forced to rely on seaweed and other seafoods. Ireland has a tradition of kelp harvesting dating back to the 17th century. Coastal communities would collect and harvest kelp, particularly storm-cast, plants which were burnt in kelp kilns (oval circles

of stopes in the foreshore). The burnt ash-remains of kelp contained soda and potash that was used as a fertilizer, for pottery glazing, and in the manufacture of glass and soap. The remains of kelp kilns are still visible along the west coast of Ireland (Guiry & Blunden 1991). Collection of maërl has been evident since the 17th century in Ireland (Briand 1991). The main use was as a fertiliser on lime-poor soils. Recently, the value-added sector of the industry has emerged using seaweed to produce attractive, high quality products.

Nevertheless, Ireland has more to offer than just seaweed. Often referred to as the Land of Saints and Scholars, the country's hills and valleys have seen Neolithic farmers clear the land, fugitives hide in its forests, churches provide shelter to Christians, and great armies mass for battle. Through tumultuous times and heroic tales, the Irish countryside is riddled with reminders of bygone eras resulting in a phenomenal array of historical sites, pilgrim walks, museums and heritage centres just waiting to be explored. Bursting at the seams with literary giants past and present, wonderful prose and poetry can be enjoyed either in the elegant rooms of our magnificent libraries or in the jovial confines of a literary pub crawl and everything in between. Imbued into daily life, you could down a pint on the same barstool that Brendan Behan used to frequent, stumble upon a Neolithic monument out in the countryside or find yourself in the midst of an impromptu traditional music seisún (session). Galway was an important mediaeval port, dominated, like Florence, by a few merchant and banking families, and the remains of several important mediaeval town houses and castles are evident in its narrow, lively streets.

Biologically, Ireland is more than just leaping salmon. Seals, whales, sharks and dolphins swim around Irish waters and one can take

tours to view these magnificent sea creatures up close. Bird-watching is a real highlight in some of the country's more remote areas and majestic seacliffs, with fulmars, puffins and razorbills all making an appearance. Inner Galway (the Claddagh) is well known for its rare waders and gulls. Also, unspoiled nature reserves and national parks are great places to spot badgers, deer, foxes and squirrels in their natural habitats.

So go on, indulge yourself with a tour around lrish spectacular sights, stunning scenery and exceptional attractions. As is said in the ancient Irish tongue "Céad Míle Fáilte" or "A Hundred Thousand Welcomes". We hope to see you In Galway at the 3rd Congress of the International Society for Applied Phycology and the 11th International Conference on Applied Phycology in June 2008.

Briand X (1991) Seaweed harvesting in Europe. In: Guiry MD, Blunden G (Eds.). Seaweed Resources in Europe: Uses and Potential. John Wiley & Sons, Chicester. pp. 259-308

Guiry MD, G Blunden (1991) Seaweed Resources in Europe: Uses and Potential. John Wiley & Sons, Chichester, 432 pp

Ó Madagáin B (1994) The Picturesque in the Gaelic Tradition. In: Collins T (Ed). Decoding the Landscape Centre for landscape Studies. Galway pp 48-59

Marine Institute (2002) Oceanographic Data Coverage of the Northeast Atlantic 1970- 2000. Marine institute, Galway 64 p

Stefan Kraan stefan.kraan@nuigalway.ie Irish Seaweed Centre, Martin Ryan Institute, National University of Ireland, Galway



NW Algal Symposium April 4-6 Charleston, Oregon

he 22nd NorthWest Algal Symposium will be held in the Oregon Institute of Marine Biology in Charleston Oregon on the weekend of Friday 4th of April to Sunday 6th of April 2008. The symposium will include oral and poster presentations covering any aspect of macro or microalgal research and this year we also particularly welcome talks on seagrasses. The symposium will provide an excellent forum for the exchange of information and ideas in a relaxed and informal setting. Long-term algal aficionados and novices alike are encouraged to participate. Graduate students are, in particular, most welcome! Awards will be presented for the best student poster and best oral presentation. Details of the meeting and abstract submittal forms can be found at

http://www.spu.edu/depts/biology/nwas/2008meeting/22ndNWAS.html

For further information contact ohiggins.tim@epa.gov

We look forward to seeing you all there!

SEPC October 24-26 Ponte Vedra Beach, Florida

he 30th South Eastern Phycological Colloquoy will take place during 24-26 October 2008 at Guana Tolomato Matanzas National Estuarine Research Reserve, Ponte Vedra Beach, Florida

The SEPC is a small, informal meeting which emphasizes student participation and student-faculty interaction. Contributed paper and poster sessions are planned for a full day of Saturday, October 25. Presentations on all aspects of the biology of algae, seagrasses, and other aquatic plants are welcome. Details and website information shall be forthcoming.

Organizers at the University of North Florida:

Cliff Ross Cliff.ross@unf.edu Dale Casamatta dcasamat@unf.edu

Hopefully we'll see you in October!

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TROPICAL MARINE FIELD PHYCOLOGY

his course is designed to orient participants to the biodiversity of tropical marine floras through field and laboratory work. Specifically, it will emphasize the development or enhancement of practical skills essential for identification, characterization and preservation of tropical marine macroalgae (seaweeds). Sampling forays in diverse environments (e.g., mangrove habitats, seagrass beds, coral reefs, sponge communities) on protected and exposed shorelines throughout the Bocas del Toro Archipelago will complement morphological and molecular investigations in the laboratory.

Morphological investigation will emphasize the preparation of specimens for microscopic examination and the interpretation of vegetative and reproductive structures in living material in the light of published observations from the primary literature. Participants will contribute to the development of the Bocas del Toro Biodiversity Inventory

http://striweb.si.edu/bocas_database and the development of a bi-lingual field guide to the local marine flora through the production of individual species pages documenting microscopical and field observations

http://striweb.si.edu/bocas_database/details.php?id=3708

Molecular investigation will emphasize sampling and preservation of material for subsequent analysis of DNA sequences for barcoding, phylogenetic and biogeographical studies. Data derived from this part of the class will contribute to the Bocas del Toro Barcode of Life Project.

Most field sites can be sampled by snorkeling (0-10m depths), but optional SCUBA diving opportunities will be available throughout the course.

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Funding: A variety of funding sources may be available to those wishing to participate in the course. Some links to potential funding sources are provided below. Please also check with your regional/national Phycological, Ecological, Environmental or other relevant societies for travel and field course support. Please note, many institutions provide support for students presenting the results of their ongoing investigations. Students wishing to present their work will be given 15 minutes to discuss their work in one of three or four 1-hour sessions during the first week of class. Since this will give everyone in the class an opportunity to learn more about each participant's research interests all participants will be encouraged to present their work.

- -STRI: need-based assistance, by 1 Mar 08 (with application) See application instructions for details
- -PSA Croasdale Fellowship, by 1 Mar 08 http://www.psaalgae.org/ops/grants.shtm
- -British Phycological Society, by 1 Mar 08 http://www.brphycsoc.org/courses.lasso
- -Botanical Society of America (click on BAS Awards) http://www.botany.org/awards_grants/detail/bsagsra.php



Bryopsis nana M.J. Wynne

FRESHWATER ALGAE COURSE 2008

Where and when? Kindrogan Field Centre, Enochdhu, Blairgowrie, Perthshire, Scotland (near the tourist area of Pitlochry), Friday, 30 May – Friday, 6 June, 2008. This is the 13th year that the course has been offered.

http://www.field-studies-council.org/kindrogan/

Immediately following the Freshwater Algae course, the Algal Culture Collections meeting will take place at the Dunstaffnage Marine Laboratory, Oban, Argyll / West Highlands, Scotland, 8-11 June, 2008.

http://www.ccap.ac.uk/algalculturecollections2008.htm You might like to consider combining both the course and the meeting in your travel plans.

What is the course about? The course takes full advantage of the excellent range of aquatic and terrestrial habitats in this beautiful area of Highland Perthshire to provide a sound introduction to the recognition, identification and ecology of freshwater algae. Emphasis will be placed on the use of the microscope and taxonomic keys for the identification to generic and species level and their ecological importance.

Who are the participants? The course is open to individuals with different backgrounds ranging from beginners to those who would like to refresh their knowledge of particular groups of algae or experience collecting in a different region of the world.

What is the full cost of the course? The course costs £455 per person (approx €665 or \$924), which includes accommodation, all meals (please notify the Centre if you have any special dietary needs) and tuition. This is excellent value for money and costs significantly less than other freshwater algal courses on offer.

Who are the course tutors? The course tutors, Dr Eileen Cox and Prof Elliot Shubert, have taught this course for the past twelve years and they have a wide-ranging expertise on freshwater algae. Eileen and Elliot conduct research at The Natural History Museum, London, specialising in diatoms and green algae, respectively. Eileen has published a key to live diatoms and is Co-Editor-in-Chief of the European

Journal of Phycology. Elliot has published a key to the non-motile coccoid and colonial green algae and is Editor-in-Chief of Systematics and Biodiversity. We will be joined for part of course, by Guest Tutor, Dr Laurence Carvalho, Centre for Ecology and Hydrology, who will give a presentation on the EU Water Framework Directive.

Is there support for students? Yes, support for a student stipend is available from The British Phycological Society

http://www.brphycsoc.org/funding.lasso

The deadlines for applications are: 30 September, 1 December, 1 March and 1 June. The sooner you apply, the better are your chances are of receiving a stipend.

Graduate students who are members of the Phycological Society of America are eligible for financial support to attend a phycology course at a field station from the Hannah T. Croasdale Fellowship.

http://www.psaalgae.org/student/stugrants.html The deadline for applications is 1 March 2008.

How do you get to Kindrogan? Edinburgh and Glasgow have international airports. The airports have a coach connection to the main railway station in the respective cities. The nearest mainline railway station is Pitlochry, which is on the London Kings Cross-Edinburgh-Inverness route. Participants will be met at Pitlochry by Kindrogan staff.

Where can I find more information? For detailed information about the Kindrogan Field Centre: http://www.field-studies-council.org/kindrogan/For course information and a booking form, go to:

http://www.field-studies-council.org/2008/courseinfo.aspx?id=503

If you have any other queries, please contact:

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SUMMER FIELD OPPORTUNITIES

Opportunities of interest to diatomists are being offered this summer at lowa Lakeside Lab.

ECOLOGY AND SYSTEMATICS OF DIATOMS

This course is an intensive, field-oriented class appropriate for advanced undergraduate students, graduate students, and post graduate workers in ecology, geology, environmental sciences, and diatom taxonomy. We will immerse ourselves in the diverse aquatic habitats and fossil deposits of the Upper Midwest to observe freshwater diatoms. Students will learn techniques in diatom collection, preparation, and identification. Lectures will cover taxonomy, systematics and biogeography of most freshwater genera. Students will complete individual voucher collections using modern database techniques. Students are encouraged to bring research materials. The use of diatoms in ecological and paleoecological research will be discussed. Class size is limited to ten students and early enrollment is encouraged. The Reimer Scholarship will be awarded to one student based on scholastic merit. June 1 to June 27, 2008, taught by Sarah Spaulding and Mark Edlund.

ANALYSIS OF ENVIRONMENTAL DATA

Analysis of Environmental Data is scheduled to be taught by Steve Juggins during the 2009 session. See

http://www.campus.ncl.ac.uk/staff/Stephen.Juggins/courses.htm for further details.

JC KINGSTON DIATOM FELLOWSHIP

The John C. Kingston Diatom Fellowship was established in 2004 by colleagues, friends and family to honor John's memory and to recognize the contributions he made to the

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study of diatoms at Iowa Lakeside Laboratory. Each summer, an award will be made to one advanced student or researcher to serve as teaching assistant for the Ecology and Systematics of Diatoms course and to engage in a research project. The fellowship includes a stipend and room and board at Lakeside and is available to domestic and international students, at the graduate level or advanced undergraduate level.

Applicants should submit a cover letter, CV, and a statement of teaching, research, and career interests to Jane Shuttleworth by February 15, 2008 (lakesidejane@yahoo.com). The JC Kingston Fellowship is administered by Friends of Lakeside Lab, Iowa Lakeside Laboratory, 1838 Hwy 86, Milford IA USA 51351.

Merit Scholarships are available through lowa Lakeside Lab (deadline April 1) and the Hannah T. Croasdale Fellowship through the Phycological Society of America (deadline March 1)

http://www.psaalgae.org/soc/croasdale.shtm

REGISTRATION AND CONTACTS: http://www.lakesidelab.org

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Summer 2008 Marine Algae course Friday Harbor Laboratories

he course lasts 5 weeks from June 9 - July 12, 2008 and is listed as Biology 539, Marine Algae(9 credits). Deadline for applications is February 1, 2008 but early applications are encouraged as it helps with planning. Later applications will be considered on a space-available basis.

The instructors are Dr. Bob Waaland and Dr. Tom Mumford. This course explores marine algae with emphasis on their role in marine ecosystems.

The course will have three key components. 1. Investigating seaweed diversity and the practical skills essential for identification of these organisms will be examined through field forays and laboratory studies of seaweed-dominated cool temperate water communities accessible in the San Juan Archipelago and on the exposed outer coast of Vancouver Island. Collection, preservation and record keeping essential for biodiversity sampling and analysis will be emphasized. Laboratory methods will emphasize the use of essential literature and microscopic examination in order to understand the morphological and reproductive details relevant to this purpose. We will include at least two dredging trips for the deeper marine flora using the R/V Centennial; we also use the underwater ROV to examine accessible seaweed communities in select localities.

- 2. The functional role of seaweeds in marine ecosystems will be examined through discussion, laboratory and field methods emphasizing the role of seaweeds as primary producers in coastal marine communities, their functional morphology and their interactions with other members of the marine community (e.g., role in food webs and as habitat). Lab and field exercises will include introduction to selected analytical gear (e.g., dissolved oxygen meters, nutrient analysis, and simple data loggers for temperature and light).
- 3. Quantitative analysis of the distributions and abundances of seaweed populations will be investigated with a combination of lectures and field and lab exercises. Emphasis will be placed on study designs, sampling procedures, methods of data analysis, and data interpretation. Students will obtain

experience with different field methods of sampling seaweeds and with handling and analyzing population and community data. Various approaches for analyzing assemblage or community data will be discussed and supported by computer sessions with relevant software. Practical applications such as the design of monitoring programs at multiple scales will be addressed; prior statistical knowledge is not a prerequisite.

4. Methods for cultivation of seaweeds will be investigated for use at laboratory to commercial scale as a tool to elucidate algal life histories, growth patterns and rates, physiological responses, ecosystem mesocosm experiments, and for production of food and chemicals.

This is a course appropriate for marine biologists, botanists and oceanographers with interests in marine biodiversity, conservation biology, and coastal ecology with an emphasis on primary producers. Graduate students and advanced undergraduates students (juniors, seniors) are encouraged to apply.

For additional information, see the Friday Harbor Labs Web Site:

http://depts.washington.edu/fhl/studentClasslist2008.html#SumA-2 or contact Bob Waaland (jrw@u.washington.edu) or Tom Mumford (Thomas.MUMFORD@dnr.wa.gov)

Application instructions and further information of special interest to students such as fellowships and scholarship, housing and meals are available at: http://depts.washington.edu/fhl/stu_index.html

In addition, the Phycological Society of America's Hannah T. Croasdale Fellowships are for students studying algae at biological field stations:

http://www.psaalgae.org/ops/grants.shtm#croasdale



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DURHAM FRESHWATER ALGAL COURSES

Venue: Hild-Bede College and School of Education, University of Durham, UK

Organisers: Prof. Brian A. Whitton (Durham) and Dr David M. John (London)

Advanced Course on Blue-green and Green Algae

Date: Sunday 6 July – Thursday 10 July 2008 Costs: inclusive cost is £360

The aim of the course is to provide training on identification of blue-green algae (cyanobacteria) and green algae at a more advanced level than in the Introductory Course on Freshwater Algal Identification. This course is planned especially for anyone who has attended the introductory course, but also for others with considerable experience of field material or who would benefit from refreshing their knowledge. The course focuses on identification, especially using modern methods including interactive keys.

Course leaders are Prof. Brian Whitton and Dr David John, with contributions from Dr Alan Donaldson (consultant) during part of course. The course is a mixture of lectures and practicals, together with a field trip. The course deals with blue-green and green algae; other groups are mentioned only if important in field samples. The field visit includes the Sunbiggin Tarn region (Cumbria), which has a range of wetland areas, and a main river site (provisionally River Eden).

Cost The inclusive cost for all participants is £360 (no VAT charge). Hild-Bede College can provide accommodation for anyone wanting to stay an extra night at the beginning or end of the course (about £32 per night). Payment can be included in the main

invoice, provided organizers are infomed well in advance; otherwise it should be paid directly to the college after arrival.

Introductory Course on Freshwater Algal Identification

Date: Sunday 29 June - Friday 4 July 2008 Cost: £850 (within Europe), £750 (outside Europe)

The aim of the course (run since 1992) is to train staff from governmental agencies, water companies, other companies, consultancies, research students and overseas visitors in the identification of the commoner and environmentally-important microscopic and macroscopic freshwater algae.

The course is a mixture of lectures and practicals, together with an afternoon field trip. It ends formally after lunch on Friday, though there is an optional trip to sites along the River Wear in the afternoon.

Dr David John and Professor Brian Whitton give the majority of the lectures. Dr Gordon Beakes (University of Newcastle), Dr Alan Donaldson (consultant) and Dr Martyn Kelly (Bowburn Consultancy) will also contribute. Everything else is provided including access to The Freshwater Algal Flora of the British Isles (John, Whitton, Brook) and interactive identification keys on CDs. Some may find it useful to bring their own portable computer. A training manual (2008 revision) will be distributed in advance of the course

Cost The inclusive cost for all participants other than full-time research students is £850 (no VAT charge). The discounted price for full-time students or people from countries outside Europe is £750. Hild-Bede College can provide accommodation for anyone want-

ing to stay an extra night at the beginning or end of the course (about £32 per night). Payment can be included in the main invoice, provided organizers are informed well in advance; otherwise it should be paid directly to the college after arrival. Dinner on Friday (but not bed and breakfast) will be provided free to anyone wanting to stay the night.

Travel and Booking for Courses

Residence and meals for both course is at Hild-Bede College which is situated on a hill above the River Wear and has a fine view over the river and city; it also has an excellent reputation for food and drink. Arrangements can be made for special diet requirements. Parking is available inside the college.

Travel Durham is on the main rail line between London King's Cross and Edinburgh. Trains are about once an hour and the journey from London (260 miles) takes three hours. A taxi from the station to Hild-Bede College (about 1.5 miles, but a long hill for walkers) costs about £3.50. The nearest airport is Newcastle-upon-Tyne. A taxi from Newcastle airport to Durham (26 miles) takes 35-45 minutes and costs about £40. The organizers usually meet members at the airport if they arrive on a day prior to the course, but this may be difficult on the Sunday.

Booking Provisional and firm reservations should be made by email

b.a.whitton@durham.ac.uk or fax 0191-386-0619, to be followed by an official order to B.A.Whitton Algal Training, 74 Archery Rise, Durham DH1 4LA, UK. Payment or a proper order form is required by 1 June and a full refund will be made to anyone paying early but cancels the reservation before 1 June, while a 50% refund will be made to anyone cancelling by 20 June.

For Further Information You are welcome to contact Brian Whitton:

b.a.whitton@durham.ac.uk phone 0191-386-7504 (home) or 0191-334-1347 (university) or David John

d.john@nhm.ac.uk phone 0208-464-6367 (home) or 0872553909 (mobile). Information on our 2008 freshwater algal training courses can also be found on

http://www.brphycsoc.org/courses.lasso

JOB OPPORTUNITIES

Post-Doctoral Researcher

Requisition #: 5100-7140

he National Renewable Energy Laboratory (NREL) in Golden, Colorado is the nation's primary laboratory for research, development and deployment of renewable energy and energy efficiency technologies. NREL's Applied Biology Group in the National Bioenergy Center has two openings for full time (40 hours per week) Postdoctoral Researchers. The initial appointments are for one year, with possible renewal for up to three years.

Duties: Conduct and participate in R&D relating to the production of lipids in microalgae for conversion to liquid transportation fuels. Research will focus on strain selection and engineering to improve the overall yield of triglycerides in microalgal mass culture. Perform microbiological manipulations with microalgal cells, growth experiments, yield optimization, systems biology analyses (transcriptomics, proteomics and metabolomics), genetic manipulation, product extraction and analysis, and enzyme assays. Participate in multi-disciplinary project teams with researchers of diverse backgrounds (microbiologists, molecular biologists, chemists, biochemists, engineers, and technicians) investigating and integrating a variety of approaches to increase lipid yields in microalgae. Interface with industrial and academic collaborators. Document work in laboratory notebooks, detailed technical memos and internal reports. Publish and present key findings in peer-reviewed journals and at regional, national, and international scientific meetings. Maintain exemplary attention to environmental safety and health issues.

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PHYCOLOGICAL TRAILBLAZER

No. 28: Sophie C. Ducker

ith the death of Sophie Ducker on 20 May, 2004, in Melbourne, phycology lost a major contemporary figure, a person who contributed much to our understanding of marine algae, sea-grasses and their pollination, horticulture, and the history of botany. On April 9, 1909, Sophie Charlotte von Klemperer was born in Berlin into a prominent Jewish family, in which her banker father had sufficient leisure time and resources to spend much of his non-banking hours in accumulating very old books. That love for books was passed down to Sophie. She was raised in Dresden, but with her father off to serve in the Austrian Army during World War I, normal life was non-existent. She was sent off to England to complete her education (at the Cheltenham Ladies College), upon which she returned to Germany. She had an abiding fascination with plant life and thus started advanced studies in botany, first with the freshwater phycologist R. H. Chodat in Geneva. This was pivotal training that opened up to her the world of algae. She also studied in Stuttgart. But this education was interrupted in 1931, when she married Dr. Johann Friedrich Ducker, an executive officer with the Chamber of Commerce in Hamburg.

With the emergence of the Nazi regime in Germany, the decade of the 1930s was an extremely difficult and dangerous time, and in 1938, Sophie, her husband, and young son Klaus were forced to flee Germany. Sophie, expecting a second child,



Fig. 1. Sophie Ducker on a Sphagnum bog near Brighton, Michigan, August, 1982.

was initially on her own. Her father had entrusted her with a small but very valuable collection of stamps to use as possible collateral in her escape, but, as she later told me, all the stamps were taken from her at a border crossing.

Another incident, a traumatic event, that she also related to me of her escape was that when her labor pains began, she was put into a room all by herself, where she gave birth to a daughter. She received no medical assistance, and the baby died soon after birth. Separated from her husband and her son, Sophie traveled to "Persia" [Iran], where she was finally reunited with her family. She happened to be visiting her parents in Rhodesia, where they had escaped to, when the War fully broke out. She was forced to remain in Africa for some time employed as a governess on a remote farm looking after 5 children. In 1940 she was able to book passage on an Italian ship headed from Mozambique to Persia, were her husband and son were located. But while that journey was underway, in June of 1940, Italy entered the war, and the boat got chased by a British warship. The ship that Sophie was on took refuge in southeastern Persia, and from that remote point Sophie made a risky journey, partly on camelback through bandit country, to reach the relative safety of Tehran. In 1941, with the three Duckers still in Persia, the Soviet Army invaded the northern part of the country, and the British forces invaded the south. Sophie's husband was placed under arrest by the Soviet

Army, but according to son Klaus' story (Ducker, 2004), his Mother was able to cajole the British authorities [she had a knack for that] in Tehran into arranging her husband's release. Once set free from the Russians, Dr. Ducker, his wife Sophie and young Klaus soon left on a boat, with very few possessions, headed for an unknown destination. They arrived in Australia just before Japan entered the War. It was in Australia, more specifically Melbourne, where they settled, established roots, and were later to become Australian citizens, although husband Fritz's qualifications and doctorate were never recognized in that country and he never achieved the status there that he would have had he elected to remain in Germany and abandon his "Jewish" wife as he was ordered to do by the Nazis.

It was only after Sophie's son was raised that she made the decision to resume the pursuit of a botanical career, even though she had no graduate degree. Her first employment was in the Botany School at 'Melboure Uni', where she worked in the fungal lab of Dr. Ethel McLennan, who proved to be an encouraging mentor (Ducker, 1988b 1995a). The focus of McLennan's lab was to establish and maintain cultures of fungi, especially *Penicillium*, as a resource for obtaining antibiotics in Australia. At first, Sophie did menial tasks such as washing glassware and preparing media, but gradually she was given more and more responsibilities, eventually becoming a coauthor to several publications with Dr. McLennan. Sophie's innate abilities and her enthusiasm for botany became obvious to everyone, and she was now even entrusted with academic responsibilities such as mentoring her own PhD students. She also transferred her attention more to the marine algae as well as to sea-grasses despite the constant discouragement and carping of her Department Head that there was no prestige, future or road to advancement in the study of such inconsequential organisms. Her interests were very broad: systematics, ecology, the relationship of host and epiphyte or parasite, pollination ecology in sea-grasses, and eventually history She was allowed to advise several graduate students over the years. These included Ian Price, Robert King, Peter Saenger, Margaret Clayton, Vicki Brown, Serena Canterford, and Cameron McK-

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onchie. She had fruitful collaborations on such diverse topics as pollination in seagrasses and distinctive red algal pigments with colleagues in the School of Botany such as Bruce Knox, Kingsley Rowan, and John Pettit. Like many of the talented Australian woman botanists of her era, such as Isabelle Cookson, Ethel McLennan, Margaret Blackwood, and Gretna Weste, Sophie was a victim of a repressive "glass ceiling" at Melbourne University for none of these talented scientists were ever elevated to full professorships and indeed were granted only the rank of reader (i.e., Associate Professor) in their last year before retirement.

Her interest in green algae resulted in several papers, including not just a monograph of *Chlorodesmis* (Ducker, 1967) but also the first publication on the use of numerical taxonomy in an algal genus (Ducker et al., 1965). She had several soloauthored and co-authored papers on various green algal genera and also on species of mostly articulated Corallinaceae, including a monograph of the Australianendemic genus Metagoniolithon (Ducker, 1979b). Her fluency in several languages gave her a facility to carry out her research in the history of phycology, with an emphasis on Australia. She dealt with contributions by the French (1979a), the Germans (1981, b, c), and the Austrians (1990a), as well as producing more general historical treatments (1981a, 1990b). But it was William Harvey, of Trinity College, Dublin, Ireland, that she was especially drawn to (1972, 1977, 1992, 2002). A visit to Harvard University resulted in her discovering a treasure-trove of letters written by Harvey to Asa Gray and his wife Emma Gray (and to others), allowing Sophie to edit a handsome volume of these correspondences (Ducker, 1988a).

Her chapter on the history of Australia phycology (done with Roberta Cowan) in the recent book Algae of Australia, Introduction is a very rich source of information and a fitting final contribution from her (Cowan & Ducker, 2007).

I first met Sophie Ducker as a grad student in the mid-1960s, when she spent some time in the Dept of Botany and Herbarium of the University of California, Berkeley, consulting with Drs G. F. Papenfuss and P. C. Silva. Some time later (in 1981) I spent a sabbatical at Melbourne Uni interacting much with her and with old friends and colleagues such as Gerry Kraft, Rick Wetherbee, Carrick Chambers, and Tim Entwisle. I was housed in a rather spartan "faculty flat" at one of the "colleges" (student resident halls), and Sophie often checked to make sure that I was getting along ok, loaning me books to read and her spare "telly". She also invited me several times to have dinner with her at her home on Percy Street in the suburb of Balwyn. I recall how she would go out into her backyard and bring in ripe vegetables and fruits like pomegranates and citrus to add to the meal. Her home was also a rich library full of choice items that she was later to bequeath to the University of Melbourne special-collections Library. It was during that sabbatical stay that Sophie kindly turned over to me a small vial of a wet-preserved delesseriacean algathat she had "secreted" out of Madagascar in 1974. It was just a fragment, but in studying that small scrap I was able to determine that it was the totally obscure species Delesseria ferlusii Hariot, the original 18th Century collection having been made at Fort Dauphin, Madagascar. But I also later realized that it had to be an undescribed genus that I was pleased to name Duckerella. Her Madagscar trip also

resulted in the description of a totally new genus and species of gigartinalean algae of the obscure family Acrotylaceae which Gerry Kraft named Ranavalona (after both the collection locality, Cape Ranavalona, and a famous early queen of the southern region) duckerae (Kraft, 1977). Sophie's Madagascar trip was not without considerable personal dangers. Madagascar was then governed by a series of unstable left-wing dictatorships, life and safety for the very few intrepid visiting westerners could be very uncertain. Awaiting departure with a large collection of marine algae, she was told that all would have to be left behind and that the penalties for attempting to smuggle out even the smallest amount of natural resources would be severe. Retiring to the ladies' room, Sophie picked out the cream of her collections (including the "Delesseria" and Ranavalona), secreted the specimens in her brazier, and returned intimidation for intimidation as she sailed majestically through customs.

A year later, in 1982, on her way to attend the First International Phycological Congress in St. John's, Newfoundland, Canada, Sophie came through Ann Arbor and stayed with me. I can't recall where the idea came from, but I decided to drive her up to a very picturesque Sphagnum bog just west of Brighton, Michigan, a perfect place to see sundews and pitcher plants, as well as to make Sphagnum "squeezings" for acid-loving desmids. Sophie quickly ventured out on the bog (Fig. 1) and although by then in her early 70s, she totally delighted in jumping up and down, as if she were on a mattress. It was a genuine quaking bog after all, and she remarked that it was her first time on such a Sphagnum bog since she had left Germany almost 45 years before. At that First Congress Sophie had been invited to give a special lecture covering the rich history of collecting done at Port Phillip Heads, south of Melbourne, a classic site that was visited by such luminaries as William Harvey, Ferdinand von Mueller, Rev. John Bracebridge Wilson, A. H. S. Lucas, Josephine Tilden, Lily Newton, Ferguson Wood, Mary Pocock, and G. F. Papenfuss. That lecture, which was both informative and entertaining, was published the next year in Phycologia (Ducker, 1983), and it is still a "good read" as Sophie's keen interest in the human side of

science comes abundantly through. At the time of the Third International Phycological Congress, held in Melbourne, Australia, Sophie was in the thick of the collectors on an organized foray to Queenscliff, Port Phillip Heads, giving out her ideas of the names of species that folks brought to her to identify (Fig. 2).



Fig. 2. Sophie Ducker (second from left), with Murray Parsons, Irené Novaczek, and Francis Magne, on foray to Queenscliff, Victoria, Australia, August, 1988.

Sophie Ducker was an avid collector and reader of books, traits inherited from her bibliophile father. The family home in Dresden had its own library, in which Sophie's father had accumulated the largest private collection of "incunabula" in the world [books printed pre-1500]. These books were later to disappear when the Nazis took over the city and burned down the home. It was only after 1989, when the Berlin Wall separating East from West Berlin came down, that some of her father's precious library surfaced. In 1991 Sophie attended an auction of those incunabula at one of the famous institutions (Sotheby's or Christies') in London.

On another occasion, it came to my attention that a copy of Samuel G. Gmelin's (1768) *Historia Fucorum* was available at an antiquarian bookshop in Ann Arbor. It was an amazingly clean copy, selling for \$350. I owned a very dog-eared copy of the book. But I contacted Sophie to find out if she was at all interested. She did not have it in her library, and she said on the phone "Buy it

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for me!" So I quickly returned to the shop and bought it for Sophie to add to her collection.

As I said at the time that I described the new genus Duckerella (Fig. 3) (Wynne, 1982), it was named to honor "the undaunted spirit" of Sophie Ducker. I came to realize that that phrase aptly summarized her entire life. She could be irascible and demanding at times, but underneath that exterior was a most generous soul, one motivated by her high standards and also never deterred by the many hardships and at times extreme challenges that came her way. She'll always be remembered as a unique "trailblazer" and a role model, someone who never gave up. At this time, just a year shy of the centennial of her birth, we have happy memories of Sophie C. Ducker and are grateful for her uncounted contributions to phycology and the history of science.

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Fig. 3. *Duckerella ferlusii* (Hariot) M.J. Wynne. Specimen collected by Sophie Ducker in Madagascar.

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I am very grateful to Dr. Gerald T. Kraft for reading over a draft of this essay and his checking the accuracy of some of the facts and offering many improvements.

Michael J. Wynne University of Michigan, Ann Arbor



Leveillea major M.J. Wynne



Pseudogrinnellia barrattiae M.J. Wynne

Island puts UAB scientists on map

f not for global warming, Chuck and Maggie Amsler might not have an Antarctic island named for them. The U.S. Board on Geographic Names this summer chose the name Amsler Island for a spit of land off the western edge of the Antarctica peninsula.

The choice honors the two University of Alabama at Birmingham marine biologists and the three decades they've worked in the cold waters off that continent. James B. McClintock, also a UAB marine biologist, had nominated the Amslers. McClintock had been honored in 1998 with the naming of a point for him along the Antarctic coast. Maggie Amsler works as a research assistant with Mc-Clintock. "I nominated them because they are unique, being a couple who has devoted so much of their time and energy and lifetimes to working in the field of Antarctic marine biology," McClintock said. Maggie Amsler said she is "dumbfounded" the island was named for them, joining other Antarctic explorers who have had landmarks named for them. "That's very humbling," she said.

Chuck Amsler said they'd been working long enough that he knew something would eventually be named for them. "I expected it to be a rock outcropping somewhere out in the middle of a place I would never go." he said. But both Amslers have been to that uninhabited island that until recently no one knew was an island. Amsler Island, a triangular plot of land about 1.3 miles long and just over a half mile at its widest point, was once thought to be part of a larger island called Anvers Island, A glacier had covered the gap between the two. The glacier had begun receding noticeably by the early 1990s. Finally, in 2004 the fast-receding glacier exposed about a 1,000-foot-wide channel between the larger and smaller islands. "When this

started calving away, it was boom, boom, boom," said Maggie Amsler, who had chronicled the receding glacier in a blog during one of her trips to Antarctica. Glaciers can recede naturally, the Amslers said. But Chuck Amsler said the rate at which the glacier is receding is consistent with being sped up by global warming. "This part of the globe is warming faster than most others, and if it weren't, that would probably still have glacier over it and we wouldn't have our island," he said. McClintock said he had submitted a nomination letter a few years ago and was told by the geographic naming board that they didn't have anything to name in the area of the Antarctic Peninsula where the Amslers have done much of their work. He said the board told him it was naming places around the continent's highest mountain. But then when he saw the island appear, he wrote the board again, thinking it was a long shot. "We were jumping up and down when we saw this had happened. It was very exciting," McClintock said. The couple say they're particularly honored that the island was named for them because of its history of research.

Amsler Island is a barren granite mass with ice. But it does have some life, including some small grass, tiny chrysanthemums with yellow flowers, fur seals and small wingless flies, the couple said. Much of the couple's work in Antarctica has involved underwater exploration.

Amsler has worked with McClintock's team, which includes Maggie Amsler, on projects that include looking for chemical compounds in the Antarctic plants and sea creatures that might be useful in fighting disease. The Amslers return to Antarctica in February for another four-month expedition.

Kent Faulk, The Birmingham News Wednesday, October 24, 2007

BOOKS New books, reviews, etc.

Book Review:

New Field Guide to the Rich Seaweed Flora of Palau

Lawrence M. Liao Scarborough, Ontario, Canada lawrenceliao_upei@yahoo.ca

Hideo Ohba, Steven Victor, Yinmang Golbuu and Hideki Yukihira. 2007. Tropical Marine Plants of Palau. Palau International Coral Reef Center, Koror, Republic of Palau. 153 pp, 15 cm x 21 cm, ISBN: 978-982-9079-03-09, price unknown, http://www.picrc.org

he rich marine flora of the Pacific Basin has recently been showcased in a number of useful pictorial field guides published during the last decade. This latest work on the marine plants of the Palauan archipelago on the western portion of the Caroline Islands highlights 109 common marine benthic algal species, as well as all ten seagrass species known to occur in its pristine waters. This handy volume is the first richly illustrated field guide to the marine plants from Micronesia.

Phycological explorations of the waters off Palau (sometimes known as Belau) began more than a century ago when the pioneering Japanese phycologist K. Okamura published a checklist in 1904. Subsequent to the turnover of the islands to the Japanese imperial government after the defeat of Germany in World War 1, the Japanese set up the Palao Tropical Biological Station which saw a renewed interest in the study of marine biota there. Palauan algal materials were then published by T. Tanaka, J. Tokida and T. Kanda. The next wave saw the Americans studying the local marine flora as part of extensive Pacific islands surveys based at the University of Hawai'i. When Palau became independent in 1981, Palauan and Japanese biologists collaborated on numerous marine biological surveys. The present work is one such productive output arising from joint field work started in 1995, and published with financial support from the Japan International Cooperation Agency.

The field guide opens with a brief historical review of marine botanical studies in Palau, followed by a section on Palau geography, climate and the state of

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the marine environment there. The impact of the 1998 El Niño phenomenon on the coral reef biota led to coral bleaching which in turn altered seaweed community dynamics. While there is a plethora of marine habitats throughout the archipelago such as the famous marine lakes, sand flats, submerged caves, mangrove swamps and of course, the various reefs and atolls, much attention is focused on Omodes, a shallow passage 340 m long and 130 m wide characterized by strong tidal currents. This unique habitat alone accounted for about 40% of all seaweed species recorded from the waters of Palau! Another section of the book featuring edible seaweeds made special mention of the fact that Palauans do not have an indigenous seaweed culinary culture quite common in other Pacific islands. Whatever seaweeds consumed on Palau are foreign species like Porphyra and Undaria pinnatifida imported from East Asia.

The field guide treats 57 taxa of marine Chlorophyta, 16 brown algae, 35 Rhodophyta, five Cyanobacteria and ten seagrasses providing a kaleidoscopic introduction to the Palauan marine flora sampled from 61 shallow and subtidal sites. Each species appears on an entire page spread with layout that is pleasing to the eye. Usually a collage of four color photographs takes center position consisting of close-up and distant in situ habit shots as well as of pressed materials accompanied by close-ups of morphological details. The headings are color-coded according to their respective divisions, provided with division, ordinal and familial names. The complete scientific names are listed and basionyms are indicated immediately below each name. Descriptions and morphometric features are provided as well as habitat information, type locality, local and global distribution.

Among the species included in the field

guide, those of Caulerpa, Halimeda and the Dictyotales are the most speciose. To my knowledge, this work provides the first definitive photographs of such rarely encountered species such as Caulerpa bikinensis, C. matsueana, C. seuratii and Halimeda taenicola. While the authors have employed the most updated species names, there are those that need to be re-labeled such as Galaxaura marginata now recognized as a species of Dichotomaria, Galaxaura fasciculata currently subsumed under an earlier name, G. divaricata. Amansia alomerata often treated as a species of Melanamansia, while Laurencia tronoi is now widely regarded as a species of Chondrophycus.

Red calcareous algae are well represented in Palau and this guide benefitted from the expertise of Eric Verheij and Masasuke Baba, who are well respected coralline algae spe-

Tropical Marine Plants of Palau

Hideo Ohba, Steven Victor, Yimnang Golbuu and Hideki Yukihira

cialists who sorted out the tricky taxonomy of nongeniculate forms in this book. However, the authors recognized three species of the calcareous genus Peyssonnelia on vague terms, and which would have been made clearer by providing taxonomic keys, one of the essential features lacking in this field guide. A helpful section especially for the novice illustrates the steps in herbarium specimen preparation as well as an extensive bibliography and a species index. There are a few proofreading omissions like misspelled last names (e.g., Leving for Levring, Montange for Montagne, Espser for Esper) and inverted initials like Y. E. Dawson for Elmer Yale Dawson, but the only obvious factual error I have found is the basionym of the seagrass Thalassodendron ciliatum which should have been Zostera ciliata.

Despite a few shortcomings, this field guide will be welcomed by phycologists and lay people alike who are interested in tropical marine plants, and the authors should be congratulated for their pioneering effort in putting together another important work showcasing Pacific seaweeds.

New algal publications

Dillard, Gary E.Freshwater Algae of the Southeastern United States, Part 8 Chrysophyceae, Xanthophyceae, Raphidophyceae, Cryptophyceae and Dinophyceae 2007. 127 pages, 22 plates, 23x14cm(Bibliotheca Phycologica, Band 112) ISBN 978-3-443-60039-6 paperback, EUR 48.00 (US\$ 73.30)

http://www.schweizerbart.de/pubs/books/bo/bibliothec-060011200-desc.html

Proceedings of the 6th International Symposium on the Use of Algae for Monitoring Rivers, Hungary Balatonfüred Sept. 12-16, 2006. Ed: Acs, Eva; Kiss, Keve T. Padisak, Judit. 2007. 284 pages, 102 figures, 53 tables, 1 plate, 1 annex, 25x16cm(Large Rivers, Vol. 161 No. 3-4)Order No. ES142016103 paperback, EUR 139.00 (US\$ 212.40)

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JUST RELEASED!!

Littler, D.S., Littler, M.M. & Hanisak, M.D. 2008. **Submersed Plants of the Indian River Lagoon**. Offshore Graphics, Inc. 286 pages, Hard Cover, ISBN 0-9678901-2-8, US\$39.00, plus shipping.

SUBMERSED PLANTS OF THE INDIAN RIVER LAGOON: A FLORISTIC INVENTORY & FIELD GUIDE is a stunningly colorful floristic compendium for those who wish to increase their botanical or ecological knowledge of Florida's spectacular east coast seaweeds, particularly the remarkable Indian River Lagoon. The book comprises a total of 234 species, richly illustrated with over 565 color photographs, 492 photomicrographs and 305 anatomical line drawings. This comprehensive field guide provides critically needed baseline inventories to resource managers, conservationists and the broad scientific community, and serves as an educational/recreational guide for the interested public, who now have a usable means to accurately identify the organisms that form the basis of the marine food web.

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Notice of recently published books on algae

Brodie, J., C. A. Maggs, and D. M. John. (eds.). 2007. **Green seaweeds of Britain and Ireland**. British Phycological Society. xii + 242 pp. [soft-cover] ISBN 0 9527115 32

http://www.mba.ac.uk/shop/greenseaweeds.php

Kraft, GT. 2007. Algae of Australia: Marine Benthic Algae of Lord Howe Island and the Southern Great Barrier Reef, I: Green Algae. ABRS, Canberra; CSIRO Publishing, Melbourne. vi +347 pp. [hard-cover] ISBN 9780643094321 publishing.sales@csiro.au

McCarthy, P. M., and A. E. Orchard. (eds.) **Algae of Australia: Introduction.** ABRS, Canberra; CSIRO Publishing, Melbourne. xvi +726 pp. [hard-cover] ISBN 9780643093775 publishing sales@csiro.au

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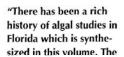
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The Seaweeds of Florida

Clinton J. Dawes and Arthur C. Mathieson

"At last! A complete and modern treatment of the seaweeds of Florida with descriptions, keys, and figures of the rich assemblage of marine algal species occurring in the diverse habitats of the Florida coastline."

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The Seaweeds of Florida

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authors are to be commended for producing a volume which will be an indispensable resource."—David L. Ballantine, University of Puerto Rico

The product of nearly thirty years of research, *The Seaweeds of Florida* offers an invaluable, illustrated reference to all known seaweed taxa found in Florida coastal waters. This volume will provide a helpful aid for researchers in Florida as well as the Caribbean and the southeastern United States.

Authors Clinton Dawes and Arthur Mathieson detail the taxonomy, morphology, and cytology, plus the ecology and distribution patterns, of 674 species. In addition, they provide keys to the genera and keys to species within the genera, a glossary of difficult terms, an explanation or derivations of the scientific names, an impressive literature compilation including sources for further information, and excellent line drawings for each species.

Clinton J. Dawes, Distinguished Research Professor of Biology at the University of South Florida, is an internationally recognized expert on the ecology of seaweed taxa and the author of eight books, including Marine Botany, as well as over 200 research articles. Arthur C. Mathieson is professor of plant biology at the University of New Hampshire, the coeditor of Ecosystems of the World, Vol. 14: Intertidal and Littoral Ecosystems, and author of over 200 refereed journal articles.

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NEW BOOKS FROM SPRINGER

e just have published the volume of Algae and Cyanobacteria in Extreme Environments (J.Seckbach, ed.); which contains various groups of algae and cyanobacteria thriving in harsh habitats. The more than 40 chapters in this book provide an updated overview of our current understanding of the life of oxygenic phototrophs - from simple prokaryotic cyanobacteria to multicellular eukaryotic macroalgae – in a wide variety of extreme biotopes in which they are exposed to diverse forms of stress: high and low pH, high and low temperatures, including below zero temperatures, excessively high and extremely low light intensities, salt concentrations up to saturation, and xeric environments. In addition, many contributions deal with "polyextremophilic" phototrophs, which are simultaneously adapted to multiple forms of environmental stress. The unicellular red alga Cyanidium caldarium and its relatives Galdieria sulphuraria and Cyanidioschyzon merolae are among the best known examples of such polyextremophiles, being adapted to life in hot thermal pools at temperatures in the range of 45-56oC and pH values as low as <2-4.

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Books on the shelves of the editors are:

- a) From Fossils to Astrobiology (J. Seckbach and M. Walsh, eds.). This volume is in progress stages. Most of the chapters have passed already the reviewing steps. All manuscripts are almost ready to be shipped to Springer.
- b) Red Algae in Genomic Age (J. Seckbach, D.J. Chapman and A. Weber, eds.). This volume is in its initial steps; we are collecting now the manuscripts and send them out to peer-reviewers.
- c) Symbiosis and Stress (J. Seckbach and M. Grube, eds.). the volume is also in its early stages, we call for contributors and have already some "early birds".
- d) Plant-Animal Interactions (Z. Dubinsky and J. Seckbach, eds.). Just received our contract from the publisher. We will start soon in recruiting our authors for this book.
- e) Role of Seaweeds in Future Globally Environments (Israel, A., Einav, R. and J. Seckbach, eds.) This volume is in its first steps.
- f) We have in mind to collect reviews for future titles on Stromatolites and on Diatoms). We are open for any recommendation for competent authors in these lines - thanks.

We would welcome any potential author for the above titles, or information of competent contributors for them. Also we would appreciate if you have some relevant illustrations for the book-covers for these titles (in colors) and we shall give you all the credit for these photos.

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September 15th, 2008

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