



# Phycological Newsletter

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## A Message from PSA President Susan Brawley



Welcome to PSA 2011! I particularly salute the Program Committee, including Local Representative Tim Nelson and Program Director Dale Casamatta, because they have an amazing annual meeting planned for us in Seattle (July

13-16 at the University of Washington). This meeting, which is a joint meeting with the International Society of Protistologists, initiates a new structure for the annual meetings. Annual meetings will combine all of the traditional elements of a vigorous scientific meeting (cutting-edge symposia and contributed papers that span the entire spectrum of research in phycology) with additional “outreach” and “inreach”. The full program and registration information will appear in late February or early March on [www.psaalgae.org](http://www.psaalgae.org).

“Inreach” activities at the Seattle meeting include a series of workshops (e.g., experimental design/statistics; basic BLAST; intermediate/advanced genomics’ software/

approaches), and one on careers will target young professionals and students. Workshops for the 2012 meeting are already in the planning stages; to suggest ones that would enhance your skills, be in contact with Education Committee Chair Jessie Muhlin ([jessica.muhlin@mma.edu](mailto:jessica.muhlin@mma.edu)) or Program Director Dale Casamatta ([dcasamat@unf.edu](mailto:dcasamat@unf.edu)). Additionally, marine and freshwater field trips will expose participants to the local biota and associated topics (e.g., management of the public water supply in the Seattle area).

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“Outreach” in Seattle will include a symposium and associated activities in the area of “Algae and Human Health”, which will interest health professionals as well as PSA members. Everything from all dimensions of the science and medical consequences of harmful algae (HABs) to cooking with nutritious algae will be featured in the symposium talks, panel discussions, demos, a special dinner—and, of course, contributed papers. We thank Maine Coast Sea Vegetables (Franklin, ME) and Acadian Seaplants Ltd (Halifax, NS) for their co-support of the symposium and its dynamic and delicious extensions on other days of the meeting; we thank the University of Washington’s NSF/NIEHS-funded Pacific Northwest Center for Human Health and Ocean Studies for co-organization to reach health professionals. Other exciting symposia are “Human Impacts on Aquatic Ecosystems”, “Algal Evolution and Genomics” (co-organized with ISOP), “Biofuels”, and an ISOP symposium on “Ecology of Soil Microbes”.

The 18 Committees of the PSA are busy recognizing extraordinary accomplishment by colleagues through the PSA Award of Excellence, the Prescott Award, and the Provasoli Award (all to be announced at the annual meeting in Seattle), awarding student grants, considering new modes of communication and publication projects to be fostered by the PSA, bolstering our Archives, and examining/initiating responses to subjects that range from functional foods to climate change.

This is a time of great growth and accomplishment by our Society.

The PSA initiated a special Fundraiser last fall to raise money to supplement the Endowment interest that supports student research and education. This Fundraiser is important, because in the weak economy, interest rates are low, yet we have an increasing number of excellent applications from students who should receive PSA support. If you have not yet contributed, will you please go to

[www.psaalgae.org](http://www.psaalgae.org) (“Fundraiser...”) and join fellow PSA members in supporting student research and education?

I request that each Society member nominate qualified members for open offices in the PSA (the Call for Nominations is open now, contact Elections’ Chair Wayne Litaker at [wayne.litaker@noaa.gov](mailto:wayne.litaker@noaa.gov) if you did not receive the electronic Call, which closes March 1st). The Elections’ Ballot will be sent to members in early April, and candidates’ statements/accomplishments will be available at [www.jphycol.org](http://www.jphycol.org) and [www.psaalgae.org](http://www.psaalgae.org). Some of you will think you don’t know nominees well enough to vote, but each candidate will have prepared a statement of his/her career interests and goals for the PSA. These are predictive statements, so read them carefully before you vote. The Society depends upon you selecting strong leaders!

Finally, a questionnaire from current officers and Committee Chairs will be sent to each PSA member in early March; only a few minutes are required to answer the questions. These ask for your direction about how to best communicate with you, your specific ideas on matters related to Committee initiatives, etc. It will only be helpful to us if most members respond, so, when this reaches your mailbox, please do give us your ideas quickly. The Executive Committee will meet for two days in mid-March in Boston (at Wiley-Blackwell headquarters, our publisher for J. Phycol.), and we’ll do our best to implement your advice then.

There will be many exciting things happening on the PSA front throughout the year. Please check [www.psaalgae.org](http://www.psaalgae.org) frequently for updates. I look forward to seeing many of you in Seattle in less than six months!



# 2011 Phycological Society of America Annual Meeting

13-16 July 2011 in Seattle, WA

Has the long-winter condition made you yearn for a phycological/protistological outlet for your life? Do you long to see the sunny skies of Seattle? If so, it is with great pleasure that we announce registration for the 2011 PSA/ISoP/NWAS will commence on March 1, with abstract submission open until May 1.



The meeting will feature five major symposia (1) Genomic insights into the ecology and evolution of algae and protists, (2) Human impacts on the aquatic environment, (3) Algae and human health, (4) Contribution of protists to soil nutrient cycling: from mesocosms to field studies and (5) An exploration of Biofuel technology.

We will also have three exciting workshops (1) Introductory Genomics Tools, (2) Advanced Genomics Tools and (3) Designing Experiments for Phycologists. In addition, we have planned a demonstration kitchen and discussions with Dr. Prannie Rhatigan author of *The Irish Seaweed Kitchen*, an NSF Town Hall meeting, and of course all the general festivities one would expect from such august societies (e.g., Bold talks, Banquet, Auction, etc.).

Special meeting rates on hotel rooms at the Watertown and University Inn from 7/12-7/17 have been reserved, and a limited number of dorm rooms are available.

The Seattle area has many cultural and recreational attractions, including during the week of the meeting, "Taste of Seattle". Seattle's weather in mid-July is typically sunny and pleasant.

**Early registration shall begin on March 1, 2011 and abstracts will be due on April 1, 2011.**

For more information, including from interested vendors, please contact PSA Program Director, [Dale Casamatta](#) or PSA Local Organizer, [Tim Nelson](#) for answers to the phycologically oriented questions. ISOP Program Chair, [Alastair Simpson](#) and ISOP Local Organizer, [Evelyn Lessard](#) will field questions for the Protistologists.

**We look forward to seeing you in July 2011!**

# PSA Developments

## Recent activities of some PSA committees.

### PSA Conservation and Policy Committee Formed

The leadership of the Psychological Society established the Conservation and Policy Committee in January 2011. The purpose of the committee is to serve as a bridge between policy-makers and PSA members, drawing on the expertise of PSA members to inform policy decisions, and alerting members to policy issues of relevance to psychology. Inaugural committee members include Jennifer Burnaford, California State University, Fullerton; John Cullen, Dalhousie University; Terrie Klinger (chair), University of Washington; and Karina Nielsen, Sonoma State University. We expect committee membership to grow in the coming year, and would especially welcome members with freshwater or tropical marine expertise.

An initial activity of the committee is to request guidance from PSA members regarding policy issues relevant to the Society and its members. To what issues can we contribute our collective expertise to improve policy outcomes? How might we prioritize issues and maximize impact? In early March, members will be invited to participate in an electronic survey through which we hope to learn more about your interests and concerns with regard to conservation and policy issues. We appreciate your willingness to participate, and look forward to hearing from you.

Communicated by Terrie Klinger (Chair)

### Communications Committee

The Communications committee maintains the PSA web site, the PSA email list, and is responsible for production of the PSA Newsletter twice yearly. Most of the information that is sent out about funding opportunities, upcoming meetings, etc., comes through this committee. Our committee of nine includes two student members: Matthew Bennett, Amber Bratcher, Ken Dunton, Suzanne Fredericq, Daryl Lam, Louise Lewis, Juan Lopez-Bautista, Tim Nelson, and Rick Wetherbee. As you know, our fine Newsletter editor, Juan Lopez-Bautista is now PSA President-elect, and Louise Lewis is the new editor of the PSA Newsletter. Juan agreed to stay on as co-editor for a short while and Louise is seeking a permanent co-editor - so contact her if you are interested. A challenge for communicating to such a large membership is keeping information flowing and the email list up to date. Last year, email Listserv Manager Tim Nelson transitioned the list from the Journal publisher to a separate server at Seattle Pacific University. Tim now receives and approves all messages, and as you have probably noticed, information is flowing much more quickly now. Daryl Lam is PSA Web Site Editor/Webmaster. We are looking for a replacement to begin in 2012. Please contact Louise Lewis if you are interested in this fun and prominent role in the PSA. Lastly, we are initiating a joint subcommittee with the Membership Committee to examine PSA's entry into social media such as Facebook.

Communicated by Louise Lewis (Chair)



# PSA Developments

continued...

## Education Committee

The goals for the Education Committee in 2011 are very ambitious, and we have a great committee that has the expertise in phycological endeavors to promote and improve teaching and research in phycology. Our committee is comprised of Michael Boller, Jackie Collier, Zackary Johnson, Jennifer Jorve, Robin Kodner, Chris Lane, Dail Laughinghouse, Karen Pelletreau, and Kate Schoenrock. We are focusing on three areas, in addition to developing a Genomics Workshop and a Career event for students for the meeting in July. One focus area is K-12 education. The committee is exploring the creation of an algal teaching toolbox for K-12 educators. A second area is Undergraduate/ Graduate Education. We are exploring ways to enhance teaching phycology by providing more teaching tools to University educators. The third area is Public Education. Ultimately, we would like to develop an exhibit for an aquarium/zoo/natural history museum that educates the public on the importance of algae in the world.

Communicated by Jessica Muhlin (Chair)

## Membership Committee

With the start of 2011, the PSA established an electronic membership directory on the publisher-sponsored web page, [www.jphycol.org](http://www.jphycol.org). Using the links along the bottom of the page, you can search for individual members or download a copy of the electronic directory. Your membership number for accessing the members' only information on this web site (electronic issues of the Journal of Phycology, election ballots,

membership information, etc.) was sent to you with the membership renewal form and it appears on the mailing label for the Journal of Phycology, if you get the print version. If you need your membership number or wish to opt out of the membership directory, please contact Membership Services at John Wiley & Sons (<http://www.jphycol.org/contact.asp>).

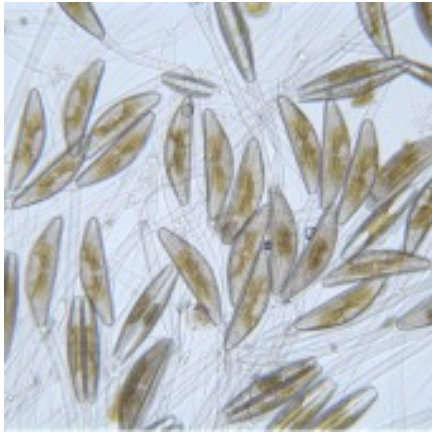
At the end of January, we had over 600 paid members of the PSA. Just think, if each member were to recruit just one member, we would easily exceed the 1000 member mark. And, if we were each able to recruit just two new members we would be well on our way to over 2000 members. I encourage you to review the membership directory, and if there is a colleague, former student, or friend that seems to be missing, please contact them and encourage them to reconsider joining the PSA. Or perhaps there are new students in your group or department that have not yet joined. In my opinion, the PSA's support of student members continues to be a hallmark of the society. Membership benefits and subscription options can be found on the PSA website (<http://www.psaalgae.org/website/about/membership.html>).

Members of the Membership Committee have already been busy this year. Thanks so much to Mine Berg, Hilary McManus, Sung Min Boo, Debashish Bhattacharya, Juan Lopez-Bautista, Phil Bucolo, and Izak Smith for agreeing to serve on the committee. Please keep your eyes open for new initiatives from this committee aimed at increasing membership numbers.

Communicated by Deborah Robertson (Chair)

# Courses

## Field Course at Iowa Lakeside Lab: Ecology and Systematics of Diatoms



<http://westerndiatoms.colorado.edu/>

22 May -17 June 2011

Ecology and Systematics of Diatoms 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 using modern database techniques and produce a written species treatment using publication guidelines. 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. Prerequisite: two semesters of introductory biology or geology OR consent of the instructor.

Scholarships are available through Iowa Lakeside Lab (deadline April 15) including The Charlie Reimer Scholarship, which is awarded to one student annually based on scholastic merit. For more information see the scholarship section of the Lakeside Lab web site:

**<http://www.continuetolearn.uiowa.edu/lakesidelab/ustudents/scholarships.html>**

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 study of diatoms at Iowa Lakeside Laboratory. Each summer, an award is 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 statement of teaching, research, and career interests to the Lakeside Lab Executive Director by email ([peter-vanderlinden@uiowa.edu](mailto:peter-vanderlinden@uiowa.edu)) by February 28, 2011. The JC Kingston Fellowship is administered by the Friends of Lakeside Lab.

**REGISTER: [www.continuetolearn.uiowa.edu/lakesidelab](http://www.continuetolearn.uiowa.edu/lakesidelab)**

CONTACT THE INSTRUCTORS:

Dr. Mark Edlund  
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# Upcoming Meetings

## Northeast Algal Society 50th Anniversary Symposium

**April 15-17, 2011 at MBL in Woods Hole, MA.**

This is truly an exciting year and for many of our members marks a long overdue return to the Marine Biological Laboratory, the roots of our society! The symposium will include a wide range of oral and poster presentations from the many disciplines of phycology. As always, the 2011 meeting will provide a relaxed and informal environment for students and professionals alike to meet with colleagues, exchange ideas and make new friends. Awards will be presented for outstanding posters and oral presentations prepared by undergraduate and graduate students. NEAS members take great pride in their commitment to student advancement, and extend an especially warm welcome to all students

with algal interests. This year's theme is "The past, present & future of phycology in the Northeast." Speakers include Dr. Michael Graham (Moss Landing Marine Laboratories), Dr. Don Anderson (WHOI), Dr. Chris Lane (University of Rhode Island) and Dr. Heroen Verbruggen (Universiteit Gent). Other activities centered on this theme include a Friday reception to share photographs of past NEAS meetings and to record oral statements marking the anniversary, and a group photograph of meeting attendees.

**Registration materials at:** <http://www.e-neas.org/>

**Deadline for Abstracts and Registration: 4 March 2011; Book award proposals: 1 April 2011**



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## 33rd Annual Southeastern Phycological Colloquy

**Host: Marine Macroalgae Research Laboratory, Florida International University, Miami, Florida**

**Dates: October 14 - 15, 2010**



The 2011 Southeastern Phycological Colloquy (SEPC) will be held October 14 and 15 at the Florida International University's Modesto Modique Campus located in Miami, Florida. Persons working on aquatic macrophytes (seaweeds and seagrasses), microalgae, cyanobacteria and protists are encouraged to attend.

The scientific program will include oral and poster presentations on Saturday (Oct. 15) and conclude with a keynote address. Undergraduate and graduate students are especially welcomed.

Please signal your intent to present a poster or oral presentation by Friday, September 15, 2011. To do so, complete the online form (available in March) found at the Marine Macroalgae Research Laboratory website (<http://www.marinemacroalgae.com>). Information on the schedule and registration fee will also be available at this site closer to the date of the Colloquy.

For further information please contact organizers: Ligia Collado-Vides ([colladol@fiu.edu](mailto:colladol@fiu.edu)) or Elizabeth Lacey ([elacey@fiu.edu](mailto:elacey@fiu.edu)).

## Upcoming Meetings continued...



### **5th European Phycological Congress**

September 4-9, 2011 - Rhodes Island, Greece

Congress Website is: <http://www.epcv.gr/index.html>

**Deadlines: Abstracts by March 4, 2011; Early Registration by March 1, 2011 and Final Registration by June 6, 2011.**

Featured Symposia: Environmental stresses on coastal marine algae, Algal biotechnology, DNA taxonomy: bar coding and species delineation, Cell biology and molecular physiology of algae; Molecular and cellular responses in algae induced by changes in the environment; Genetics of speciation (ecological and molecular); and Algal genomics; Freshwater algal biogeography and biodiversity.

### **6th Asia-Pacific Phycological Forum**

October 9-14, 2011 - Yeosu, Korea

Visit the Conference web site for registration materials and other information:

<http://www.appf2011.org/sub/invitation.asp>



### **IX Congreso de Ficología de Latino América y El Caribe**

### **VII Reunión Iberoamericana de Ficología and IX Simposio Argentino de Ficología**

November 7-11, 2011 in La Plata, Buenos Aires, Argentina

Deadline for Abstract submission: May 31, 2011.

Further details can be found at <http://www.fcunp.edu.ar/sitio/farmacognosia/wp-content/uploads/2010/02/IX-Congre1...pdf>.



# Deadlines for Awards, Grants, Fellowships

## PSA Croasdale Fellowship

**Deadline: March 1, 2011**

The Hannah T. Croasdale Fellowships are designed to encourage graduate students to broaden their phycological training by defraying the costs of attending phycology courses at biological field stations. The purpose of the award is to broaden phycological training and not necessarily to further research goals. Proposals to study at field stations associated with universities other than the student's own are especially encouraged. Awards are made directly to the student in amounts up to \$1,500 each.

Please submit the following materials to Eric W. Linton (address below), Chair of the Grants-In-Aid of Research Committee by electronic submission in PDF or Word .doc format:

1. A complete application (details at <http://www.psaalgae.org/website/opportunities/grants/croasdale.html>)
2. An unofficial copy of your transcripts, if possible.
3. One letter of recommendation from his/her major advisor, sent directly to Dr. Eric Linton.

Additional information on the qualifications and criteria for this award can be found at the PSA website: <http://www.psaalgae.org/website/opportunities/grants/croasdale.html>

Additional questions, and completed applications and letters of recommendation should be sent to: Dr. Eric Linton, Chair of the Grants-In-Aid of Research Committee, Department of Biology, Central Michigan University, Mount Pleasant, MI 48859 USA. Email: [linto1ew@CMICH.EDU](mailto:linto1ew@CMICH.EDU)

## PSA begins collaboration with BSA to award Darbaker Prize: Nominations close April 1st

At the request of the Botanical Society of America, **the PSA will collaborate with the BSA to award the Darbaker Prize** for meritorious studies of microscopical algae. Nominations are now open and close April 1, 2011 ([http://www.botany.org/awards\\_grants/detail/darbaker.php](http://www.botany.org/awards_grants/detail/darbaker.php) describes Prize and lists previous awardees; to make nominations, go to [http://www.botany.org/awards/E\\_Darbaker.php](http://www.botany.org/awards/E_Darbaker.php)). The PSA has appointed the 2011 Darbaker Committee, which was then also appointed by the BSA to meet the terms of the BSA's Darbaker Endowment. The Prize is awarded to a resident of North America for "meritorious studies of microscopical algae published in English...based primarily on papers published during the last two calendar years" (i.e., 2009, 2010). The awardee receives a certificate and monetary prize; this is an additional opportunity for us to recognize splendid work by a phycologist, including younger scientists. The awardee will be recognized at both the PSA and BSA annual meetings. Please participate in the nominations for this distinguished prize. At the website (see above), the nominator must submit pdf copies of the recent papers (2009, 2010) of the nominee that should be considered by the Committee, and a statement about the merit of the nominee's research.

**Phycological  
Trailblazer  
No. 34:  
Yukio Yamada**



Yukio Yamada, Dinard, France, 1957.  
(Image taken by W. R. Taylor)

*Yukio Yamada was one of the most significant phycologists of the 20<sup>th</sup> century, not just in terms of his contributions to knowledge of the Japanese marine algal flora but for his international reputation. Even though there have been two previous tributes to Yamada (Kurogi, 1976; Tatewaki, 1996), his story is worth repeating in this series.*

Yamada was born on 14 August, 1900, in Kyoto, but the family moved to Tokyo where he was raised. He was an undergraduate student in the Botanical Institute of the Faculty of Science of the University of Tokyo, where his initial mentor was Professor Bunzo Hayata, a terrestrial botanist. It was Hayata who encouraged Yamada to study the marine algae of Taiwan (Formosa), and Yamada was introduced to the famous Professor Kintaro Okamura, the foremost phycologist in Japan. Okamura was at the Imperial Fisheries Institute in Tokyo, and his influence drew Yamada toward his own career in phycology. Yamada's (1925a, b) first publications were from his undergraduate research done on the algal flora of Taiwan. His first two publications were in German, in that Yamada had earlier taken the German curriculum in high school in preparation for going into medicine. But he decided that botany was his primary

interest for a career. Working with Okamura, Yamada had access to very rich herbarium collections that had been deposited there from such earlier workers as Kingo Miyabe and Kichisaburo Endo as well as the collections made by Okamura.

Showing such early promise, Yamada received a grant from the Japan Society for the Promotion of Scientific Research, which afforded him the opportunity to spend two years abroad, primarily at the University of California at Berkeley, where he worked on the UC holdings of *Laurencia* under the supervision of Prof. W. A. Setchell. Yamada spent 10 months at the Berkeley Herbarium as a non-salaried research fellow. He then went on to Europe, visiting a total of 25 herbaria in eight different countries (Tatewaki, 1996). This was a major step in introducing him to contemporary phycologists and in seeing a great diversity of collections, especially

*Laurencia sensu lato*. Yamada acknowledged the guidance from Setchell and the valuable suggestions offered by Nathaniel Gardner of the UC Herbarium. He had access to the photographs of type specimens in European herbaria taken by Setchell. Yamada's monographic treatment of *Laurencia* was published in 1931, and it also served as his doctoral dissertation for the Imperial University of Tokyo the same year.

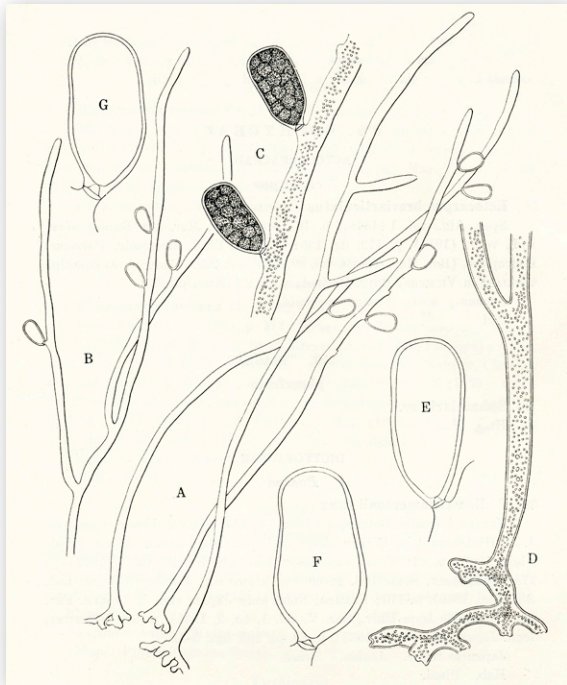


Fig. 1. *Derbesia ryukyuensis* Yamada & Tak. Tanaka [now *Pedobesia ryukyuensis* (Yamada & Tak. Tanaka) Kobara & Chihara] (Fig. 5 in Yamada & Tanaka, 1938).

With T. Kinoshita, he published a series of papers (1948, 1949, 1950) depicting the marine algae and animals occurring on the shores of Hokkaido. In addition to his interest in algae of Taiwan (Yamada & Tanaka, 1934; Yamada, 1950) and northern Japan, he paid much attention to the algal flora of tropical regions of Japan, such as

the Ryukyus (Yamada, 1934; Yamada & Tanaka, 1938). *Derbesia ryukyuensis* Yamada & Tak. Tanaka (Fig. 1) was one of the new species described. He was also involved in studies of algae of Micronesia, (Yamada, 1944). Yamada selected certain genera for his special attention, *Liagora* being one of these (Yamada, 1937, 1938a, b, c, d) as were *Caulerpa* and *Halimeda*. Although the impression and format of Yamada's 1944c paper appears that his new taxa of *Caulerpa* and *Halimeda* are being described in that paper, he had actually validated these names earlier in his 1940 and 1941b papers. His new species of *Caulerpa* included *C. matsueana*, *C. antoensis*, and *C. filicoides*. From the southern regions of Japan, Yamada also focused his attention on such genera as *Sargassum*, *Eucheuma*, and *Rhodopeltis*. He was especially interested in life histories of marine green algae, such as species of *Ulva*, *Monostroma*, *Blidingia*, and *Kornmannia* (Yamada & Saito, 1938; Yamada & Kanda, 1941; Yamada & Tatewaki, 1965).

Another contribution made by Yamada was his work to gain legal protection for the "miraculously spherical" *Cladophora aegagropila* balls, or marimo, occurring in Lake Akan, on Hokkaido. On the bottom of this lake with a 5-square-mile surface area marimo reach a diameter often to 20 or even up to 30 cm (12 inches) and have a smooth, velvet-like surface. They have been described as "the rolling green jewels under the water". When the government in 1921 first designated marimo a "Natural Treasure", this led to people coming from all over the country to take them home as souvenirs and to sell them in the cities. The installation of a

hydroelectric power plant in 1920 on the Akan River, which feeds the lake, resulted in reduced water levels and in many of the marimo being exposed to air and dying. By the 1940s, the marimo was in great danger, and the local people, with help from folks like Yamada, organized an outcry to preserve them. Those efforts included the start of an annual 3-day marimo festival held in autumn, when the marimo is at its peak of growth. The indigenous people, the Ainu, participate in a ritual in which the marimo is moved in wooden boats and honored. In 1966 the Marino Exhibition and Observance

Center was re-opened by Aka n T o w n a f t e r extensive renovation.



Japanese postage stamp from 1969 depicting “marimo”.

Yamada was instrumental in establishing the Japanese Society of Phycology, founded in 1953, and he served as the Society’s first president for a 13-year period. He was also a founding member of the International Phycological Society and served as its president in 1966.

Yamada had a number of algal taxa named in his honor. Segawa (1955) described *Yamadaea* [*Yamadaia*], a genus of small-statured articulated coralline red algae named after him, and Abbott (1970) recognized *Yamadaella* (Fig. 2) as a segregate genus for *Liagora caenomyce*, a species that was widely known from the tropical Indo-Pacific and later reported to occur in the tropical western Atlantic (Wynne & Huisman, 1998). Mikami’s (1973)

*Yamadaphycus*, a genus of Delesseriaceae, has been treated as congeneric with *Heteroglossum*, described by Zinova (1972) the previous year (Schneider & Wynne, 2007).

Professor Yamada passed away from myeloma in his native Kyoto on the evening of July 6, 1975, at the age of 74.

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Fig. 2. *Yamadaella caenomyce* (Decne.) I.A. Abbott. Collection from the Dominican Republic.

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**Michael J. Wynne**

**University of Michigan Herbarium, Ann Arbor**

## Obituaries

The phycological community lost three great scientists in the last few months. Here, we offer an overview and links to published pieces honoring their very productive lives. Each uniquely influenced the field of phycology. They will be missed!



Photo by W.R. Taylor, 1971, Sapporo, Japan

### Isabella Abbott (1919-2010)

Marine phycologist and ethnobotanist, Dr. Abbott was born in Hawaii and in 1950 earned a Ph.D. from the University of California, Berkeley. She held positions at Hopkins Marine Station of Stanford University, and the University of Hawaii. Dr. Abbott authored over 150 publications on the systematics, biogeography, and ethnobotany of marine algae, including the well known book *Marine Algae of California* (with G. J. Hollenberg). She also helped us appreciate the edible seaweeds. In 1997 she received the Gilbert Morgan Smith Medal from the U.S. National Academy of Sciences. Further

information about Dr. Abbott can be found at the Stanford University News web site (<http://news.stanford.edu/news/2010/december/izzie-abbott-obit-120710.html>).

### Frank E. Round (1927-2010)

Diatom systematist and ecologist, Dr. Round is well known for his extensive work on the freshwater and benthic diatoms. Many of us were dazzled by his SEM images of diatoms. Dr. Round was a member of the faculty at the University of Bristol, where he also served as Dean of the Faculty of Science for several years. His research resulted in publication of over 170 articles, including the book *The Diatoms: Biology and Morphology of the Genera*. His extensive specimen collection was donated to the Royal Botanical Garden Edinburgh. Additional information about Dr. Round can be found at the following University of Bristol web site: (<http://www.bristol.ac.uk/news/2010/7306.html>).



Photo by W.R. Taylor, 1965, Woods Hole MA



# Obituaries

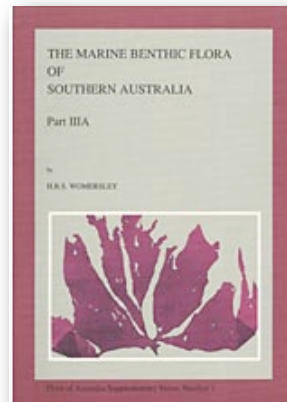
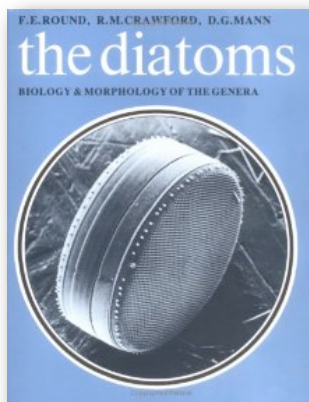
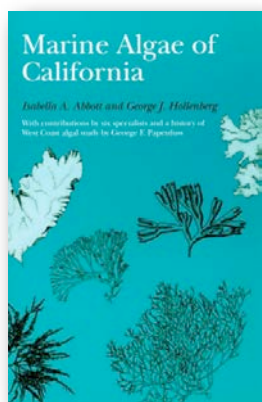
## H.B.S. Womersley (1922-2011)

With sadness, I must report the death of Hugh Bryan Spencer Womersley (19 November 1922 - 16 January 2011), author of the monumental six volume work *Marine Benthic Flora of southern Australia* (1984-2003) and numerous other publications from 1946 onwards dealing with the systematics and ecology of southern Australian marine algae. Bryan's professional career was based at the University of Adelaide, where he became Professor of Botany in 1974 and was appointed Emeritus Professor upon his retirement in 1987. He also held the positions of Honorary Associate and Curator of Algae at the Botanic Gardens of Adelaide and State Herbarium, where his collections are permanently housed. A 75th birthday tribute (including portrait) appeared in 1998 in *Botanica Marina* 41: 1-5, and a portrait and brief biographical information also appeared on p. 176 in an article (*Phycologia* 40: 172-181) honouring the Presidents of the International Phycological Society from 1961-2001. Bryan is survived by his wife, Alleyene, and sons Robert and Peter.



Photo by M.J. Wynne, 1991, Adelaide

Communicated by Bill Woelkerling.





# News from Colleagues

## Four recent news items to pass along.

As reported by Montana State University (<http://www.montana.edu/cpa/news/nwview.php?article=9083>) and in Science Daily (<http://www.sciencedaily.com/releases/2010/11/101115091902.htm>) MSU was granted a preliminary patent for the addition of the bicarbonate ion at a particular stage in the cell cycle of an alga that increases the triacylglyceride (TAG) accumulation of the cell several fold and reduces the time it takes to achieve that level of TAG by half. It has been shown that the bicarbonate is not a source of carbon for growth. According to Keith E. Cooksey at MSU, work is underway on the economic, metabolomic and genomic aspects of this finding.

An article by Frederick Zechman (California State University at Fresno) et al. published in the 12/2010 issue of *Journal of Phycology* details **discovery of a new ancient lineage of green algae** that includes the genera *Palmophyllum* and *Verdigellas*. The two obscure algae, representing the new order Palmophyllales, occur in deep marine waters. This early diverging lineage of pamelloid algae provides new information about the earliest green plants and will be the subject of many future ecological and physiological studies.

The article was featured by the BBC ([http://news.bbc.co.uk/earth/hi/earth\\_news/newsid\\_9195000/9195714.stm](http://news.bbc.co.uk/earth/hi/earth_news/newsid_9195000/9195714.stm)) and from there across the wires. The full article can be read at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1529-8817.2010.00900.x/abstract>.



Photo by D. Hanisak

## Sarah Spaulding reports the release of a valuable new resource for diatom biologists, water quality managers, and ecologists.

Spaulding, S.A., Lubinski, D.J. and Potapova, M. (2010). Diatoms of the United States.

<http://westerndiatoms.colorado.edu>

Accessed on 18 February, 2011.

At right is a screen shot of one of many genus pages, showing the data available. Over 100 species pages also are available, and new entries are being added.

### *Didymosphenia*

M. Schmidt in A. Schmidt 1899 Category: Asymmetrical biraphid  
TYPE SPECIES: *Didymosphenia geminata* (Lyngbye) M. Schmidt in A. Schmidt

Diatomella

Discostella

Genus Description

Citations/Links

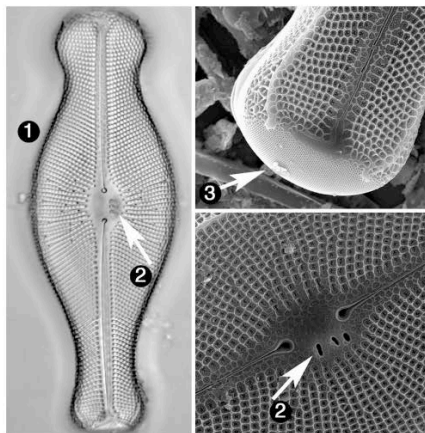


Image Credit: Sarah Spaulding, Danielle Pite

CLASS: Bacillariophyceae  
ORDER: Cymbellales  
FAMILY:

1. Valves large and robust
2. Stigmata one to several
3. Apical porefield at footpole, large

Frustules of *Didymosphenia* are asymmetrical to the transapical axis and symmetrical to the apical axis (although some populations may be slightly to strongly asymmetrical to the apical axis). One to several stigmata are present, a feature that may be variable within a given species. A large apical porefield is present at the footpole. The terminal raphe fissures are deflected prior to reaching the apical porefield. Frustules are wedge shaped in girdle view. A marginal ridge of silica extends along the valve, terminating at the headpole in small spines.

*D. geminata* is common in North America and in the Upper Great Lakes. It is locally abundant in some lakes and streams, at times producing high biomass. The large volume of mucilaginous stalks of *D. geminata* may cover surfaces and foul water intake pipes, reaching nuisance proportions. It is invasive in New Zealand and expanding its range in regions of the Northern Hemisphere. This genus is more closely allied to the cymbelloid diatoms than to the gomphonemoid groups, as has been previously reported. Lake Balkal, in Siberia is considered a hotspot of diversity for *Didymosphenia*.

#### Cite This Page:

Spaulding, S., and Edlund, M. (2009). *Didymosphenia*. In Diatoms of the United States. Retrieved February 18, 2011, from <http://westerndiatoms.colorado.edu/taxa/genus/Didymosphenia>

Contributor: Sarah Spaulding | Mark Edlund - January 2009

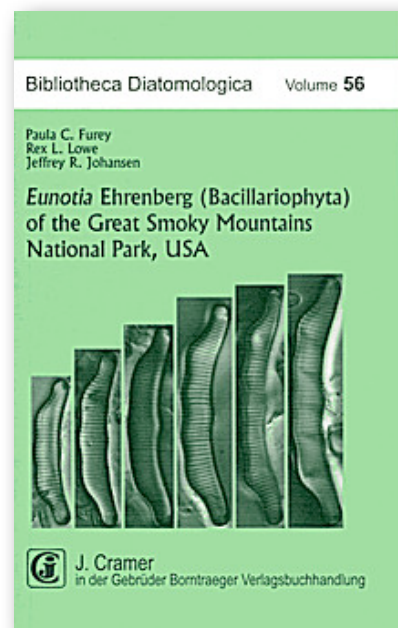
As communicated by Keith E. Cooksey at MSU, the Phycological Society of America is a supporting organization for the **Algal Biomass Organization** ([www.algalbiomass.org](http://www.algalbiomass.org)). The ABO is a trade and scientific organization whose main role is to promote products that are derived from algal biomass and the research that is necessary for this. Each year we hold a scientific meeting. This year's meeting, which was in Phoenix, AZ, was attended by about 750 scientists and industrial personnel. At this event PSA had a joint symposium on algal metabolism as it related to biofuel formation. Of interest to PSA job seekers is that algal biomass companies advertise positions on the web site. These are often well paying positions in industrial algal research.

## New Books

**Paula C. Furey, Rex L. Lowe, and Jeffrey R. Johansen. 2011.**

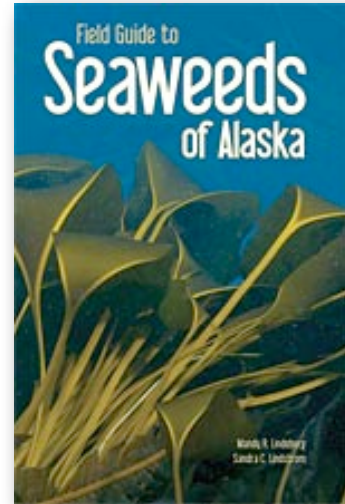
***Eunotia* Ehrenberg (Bacillariophyta) of the Great Smoky Mountains National Park, USA. 132 pages, 2 tables, 34 plates. (Bibliotheca Diatomologica, Band 56). ISBN 978-3-443-57047-7, paperback, 59.00 €**

This book provides an image rich documentation of the *Eunotia* flora of the Great Smoky Mountains National Park, USA. Over 50 sub-generic taxa of *Eunotia* are presented, including 14 proposed new species. Image plates include both light and scanning electron micrographs showing size ranges, morphological variability, and external and internal valve ultrastructure. The taxonomic section includes morphological measurements and some autecological information for each taxon. These data provide a useful resource guide that contributes to our understanding of the *Eunotia* flora of North America, and will facilitate biomonitoring efforts and taxonomic comparisons with past and recent *Eunotia* flora descriptions from around the world.



**Mandy R. Lindeberg and Sandra C. Lindstrom. 2010. Field Guide to Seaweeds of Alaska. ISBN: 978-1-56612-156-9. 192 pp. Water-Resistant Paper. \$30.00**

This book is the first and only field guide to more than 100 common seaweeds, seagrasses, and marine lichens of Alaska. Filled with color photos and clearly written descriptions, and printed on water-resistant paper, it is a must-have addition to the reference collections of any scientist, coastal monitor, naturalist, educator, student, or beachcomber interested in Alaska's coastal ecosystems. Author Mandy Lindeberg is a biologist with the National Oceanic and Atmospheric Administration in Juneau, Alaska. In 2006 she discovered a new genus of kelp, golden V (depicted on the cover), in the Aleutian Islands. Coauthor Sandra Lindstrom is Curator of Algae at the University of British Columbia Herbarium, Vancouver. She has published many journal articles and books on algae.



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**ITEMS  
FOR THE NEXT  
PHYCOLOGICAL NEWSLETTER ARE  
DUE AUGUST 15, 2011**

to Louise Lewis ([Louise.Lewis@uconn.edu](mailto:Louise.Lewis@uconn.edu))

