



The Phycological Society of Southern Africa

**Newsletter
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From the Editor

We have come to the end of what I hope has been a successful year for all of you. The year commenced with a dramatic change to the format of the newsletter; I hope none have been offended by this move. Along with so many changes came the introduction of a *featured articles* segment. I do hope that these articles have been of general interest to all members giving us some idea as to how broad an impact our research may have in various research, technical and educational endeavours.

For this issue, I thought it best to get a submission highlighting the importance of environmental education, especially in lure of the recently released *Coastcare fact sheet series* produced by Marine and Coastal Management. I personally have found it an invaluable tool, not only because it is useful, but also because it is an excellent example of how to popularize ones focus areas in a simple yet informative manner.

Freshwater phycologists, I haven't forgotten about you. Please keep an eye on the next issue of the Newsletter. It will include an article on the global waters assessments and its impacts on biota.

Once again, a special thank you to all those who have contributed to this issue of the newsletter; without your contributions it would be impossible to produce anything. Please feel free to forward any submissions (esp. student articles) for future issues of the newsletter directly on to me or to your regional collators (see below).

Northern Areas

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Southern Areas

Enrico Tronchin

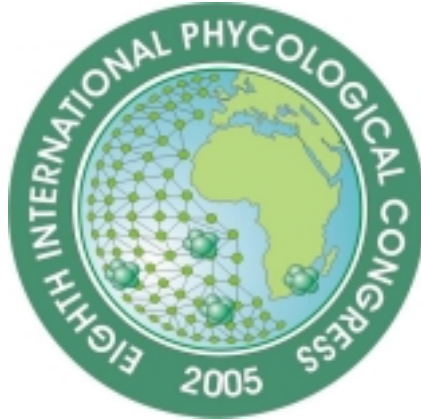
tronchin@botzoo.uct.ac.za

Sincerely
Gavin

Attention All

1. IPC logo

A call for entries for the IPC logo was made in 2000 and the closing date was the end of August 2002. A total of 4 entries were submitted and all the members of the Local Organizing Committee (LOC) were asked to vote for **all** entries, the lowest value (1) being awarded to the first choice and so on (2 for the next best choice, 3 for the 3rd and 4 for the last). The logo with the lowest overall score therefore won. Alongside is the winning motif and the one that has been adopted as the official conference logo for the 8th International Phycological Congress to be held in Durban in 2005. The LOC would like to take this opportunity to thank all those who rendered submissions for the conference logo.



2. Student Submissions and Prizes

The student responses have been extremely poor! We have only had two submissions for the year, both appearing in the June/July issue of the Newsletter. Special thanks should go to Lizeth Botha and Debby Robertson-Andersson for their submissions. I feel it necessary to single out these members to encourage the rest of the student membership to offer some of their valuable time to this endeavour. Other than the annual conference, the Newsletter is the only Society activity that we are asked to partake in. Supervisors, please encourage your students to submit articles for this segment. Your contributions will be most appreciated.

Guidelines: See the website! Just follow the *Featured Articles* navigational link. Remember, there is R400 up for grabs.

3. PSSA Website

Our website (<http://www.botany.uwc.ac.za/pssa/>) is recording very little access, especially from PSSA members. I am not quite sure what this means. Please check the site regularly for updates and comment on anything you find lacking, incorrect, inappropriate or simply just stale. Also remember that there are a number of segments on the website that you need to monitor regularly. For a complete list of these segments, refer to “*New on the PSSA website*”

4. Contact Details and Research Areas

If you haven't already done so, please check your details on the new website for omissions or incorrect details. Remember that we would like to know your specific research areas and not that you are just simply interested in *Phycology*. Also, for those members who have opted to describe their research interests in one or two key words, would you be so kind as to give the rest of us some greater insight into your area(s) of expertise. By the end of January 2003, I will be taking down all *pop-up windows* (on the website) prompting you to check your membership details.

Featured Article

The seashore in service of the environment

This seashore has been described as an interface of dynamic exchanges where land and sea intersect. The rocky shore, in particular, is undoubtedly one natural area that has been thoroughly researched and documented. This research has contributed immensely to our understanding of ecological interactions within this environment. But how can the seashore and the wealth of knowledge developed about it be of service to the environment? To answer this question I will expand on the concept of environment and clarify understandings of this term.

The environment is generally seen to be the biophysical world and the interactions occurring there. The interactions occurring between different living organisms and between the living organisms and the non-living factors that exist within such environments, maintain the balance in these environments. In the marine environment this would include plants and animals that inhabit seashores and physical factors such as tides, wave action, wind, light intensity and so on. These interactions are thought to contribute to maintaining life on earth and contribute towards ecological balance. Threats to this balance, which often lead to degradation of conditions, are called environmental risks or issues.

As environmental issues were probed and the underlying causes of environmental risks were revealed, human understanding of the term environment was broadened. The underlying causes of most environmental issues were traced back to some or other human activity. With this increased understanding and new insights the term environment became constructed as the product of interactions between human activities and the life-supporting biophysical world in which human activities occur. Other dimensions were added to the physical construct environment, namely social, political and economic activities of humans. These activities of humans have an

effect on the biophysical environment and the seashore is no exception. Humans have fished and mined the oceans for many years and used coastal waters as dumping grounds for waste. Developments related to industry and human habitation now impact on large tracts of the seashore. Environmental issues abound in the marine environment and responses to problems have often been by way of legislation based on research data. The question is, is this enough to prevent disaster from striking in the marine environment and is it a sustainable way of addressing the problem?

As a response to the potential crisis, environmental education enters the picture. What are the main tenets of environmental education (EE) and how might this reduce environmental degradation or prevent further degradation of marine environments?

The main tenets of environmental education are:

- To increase *awareness* of and a sensitivity towards problems in the environment.
- To increase *knowledge* of immediate or vulnerable environments and,
- To assist with changing *attitudes* that contribute to the choices people make regarding habits and behaviour.
- To encourage *participation* in decision making and action regarding the welfare of environments.

Learners (young and old) need to be directly exposed to environments to better understand the problems and potential issues. It is generally felt that engaging learners in active learning during which they gather information about, investigate issues in and propose action for (improvement) will assist with developing insights and competence regarding issues and serve to reduce or prevent further degradation of environments. Can the seashore serve as a resource in which these outcomes/objectives might be realized?

In an article in 1991, Derek Keats described the SA seashore as an “under utilized natural laboratory” and Archer–Thompson (1991)

lists the following attributes, which makes the rocky inter-tidal zone suitable as a resource for teaching ecology:

- Naturalness: consists of unspoilt natural areas to a large extent facilitating ecological studies and an understanding of biophysical aspect of the environment
- Accessibility: striking distance of most people and no special equipment or skills are needed to conduct studies and investigations
- User friendly: sizes of organisms easy to see and handle and there is compression in space i.e. much variation over small space.

Threats and risks as a result of human actions are common. These include:

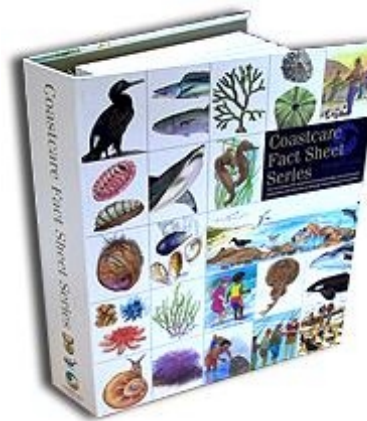
- Alteration of marine and coastal habitats
- Increased exploitation of marine resources
- Overall coastal water quality problems (pollution from various sources)

As an accessible environment with many threats and risks, the seashore is an area that can serve as an excellent resource to achieve EE outcomes, EE responding to risks to prevent further problems and issues and deterioration. The seashore can serve as a resource to accomplish this and thus serves the environment as a whole. It therefore needs to be exploited in this way through combined efforts of and collaboration between marine biologists, conservationists and educators. In this way the seashore can contribute through environmental education processes to greater environmental literacy, thus serving the broader environment.

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The Department of Environmental Affairs and Tourism's Marine and Coastal Management (MCM) branch, have recently launched their *Coastcare fact sheet series*. For those of you actively involved

in environmental education, these fact files, containing over 200 fact sheets and 6 posters, are freely available nationwide.



Oceans Aquarium or from the head of education at the aquarium, Russell Stevens (021-418 3823).

Enquire at your nearest MCM branch or contact the national distributor, John Kiesser (021-402 3330). Cape Town based members may also obtain these fact files from the information desk at the Two



Conference Countdown

The nineteenth congress of the PSSA will to be held at the Fish River Sun Conference Centre. The Fish River Sun is situated approximately 200 km east of Port Elizabeth. The guest speaker will be Graham Underwood, an estuarine microphytobenthos expert from the United Kingdom.

Both oral and poster presentations are invited. Oral presentations are to be 20 minutes (15 minutes + 5 minutes for questions) and posters should be no larger than A0 size. Data, slide and overhead projectors will be available for oral presentations.

The conference will commence with a "Meet and Greet" on the Sunday evening (19 January). Presentations will be on Monday and Tuesday (20-21 January). **A microphytobenthos workshop/field trip was originally planned for Wednesday (22 January), but due to unforeseen circumstances, this will now take place on the Sunday afternoon (19 January) at 13H00.**

As usual, there are four awards on offer for presentations: two for the best oral and poster presentations on economic phycology and another two for the best oral and poster presentations by student contributors. Student participants may apply for financial assistance by submitting a motivation and an abstract to the organizing committee.

You are probably well aware that all deadlines have come and gone. If however, you are still interested in attending, please contact the organizing committee through Derek du Preez at superbt@upe.ac.za. Full details of the conference can be found on the Society's website at <http://www.botany.uwc.ac.za/pssa/conference/>.

Calendar of Events for 2002/3/4

A. Upcoming Conferences


1. The Pacem in Maribus Conference (XXX) 2002 (*Peace in the Ocean*), 8-14 December.
Website: <http://www.ioi.uwc.ac.za/PIM2002/>
2. Marine Science and Technology for Environmental Sustainability, 17-18 December 2002.
Website: <http://www.ncl.ac.uk/ensus/>
3. Joint South African Association of Botanists & The International Society for Ethnopharmacology Conference, 7-11 January 2003.
Website: <http://www.up.ac.za/academic/botany/>
4. Sixth International Temperate Reef Symposium, 13-17 January 2003. Website: <http://www.zool.canterbury.ac.nz/conference/>
5. Oceanology International 2003, 4-6 June 2003.
Website: <http://www.oiamericas.com/english.asp>
6. The 5th Asia-pacific Conference on Algal Biotechnology, 14-17 July 2003.
Website: <http://www.qdio.ac.cn/english/meeting/index.htm>
7. The 3rd European Phycological Congress, 21-26 July 2003.
Website: <http://www.epc3.org/>
8. The 6th International Marine Biotechnology Conference, 21-27 September 2003. Website: <http://www.tuat.ac.jp/~marine/>
9. The Fourth International Symbiosis Society Congress, 17-23 August 2003. Website: <http://people.bu.edu/dzook/>
10. The XVIII International Seaweed Symposium, 20-25 June 2004.
Website: <http://www.niva.no/iss2004/>

B. Upcoming Workshops

1. None to report on!

New on the PSSA Website

The following segments all have new additions since we last communicated. If you haven't noticed them already, here they are.

1. *Annual Conference* – Here you will find updates, and comments on the annual PSSA conference, as well as information on conferences that the Society is hosting. Keep an eye on the 8th International Psychological Congress (IPC8) for 2005.
2. *Newsletter* – For those who wish to have the original colour version, the newsletter will always be available online.
3. *Featured Articles* – current news and popular articles from outside and within (student articles) the Society.
4. *Calendar of Events* – See section on previous page.
5. *Notices* – Your guide to bursaries offered, postdoctoral positions and employment opportunities (contractual and permanent).
6. *Links* - There are lots of great new sites of interest to psychologists here! Look out for the  image. It is your indication of what's new on the page.