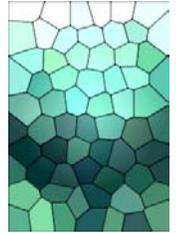

Eelgrass Watchers

A NEWSLETTER ABOUT EELGRASS CONSERVATION IN BRITISH COLUMBIA

Issue No. 1
November 2002



Contest!

The title to this newsletter is up to you! We are having a contest to create a suitable newsletter name. The winner will win membership to the Pacific Estuarine Research Society (PERS). PERS is a non-profit organization "formed to bring together, for educational purposes, persons interested in estuarine and coastal issues." The winner will receive the PERS newsletter.

Send your suggestions to:

Seachange@axion.net

Deadline is January 15, 2003.

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Welcome to the Beginning...

The beginning of what, you may ask? Well, to a quarterly published newsletter of good stories, solid information, great maps, wonderful photographs and whatever else you may want to include about the state of eelgrass communities up and down the coast of British Columbia.

You may be a coastal stewardship group, a scientist, a consultant or an interested shoreline resident -- the "Eelgrass Watchers".

Welcome to our first edition. May the eelgrass you are conserving through your work wave their emerald blades in celebration!



Eelgrass Conservation Efforts Underway

Cynthia Durance, Precision Identification
precid@shaw.ca

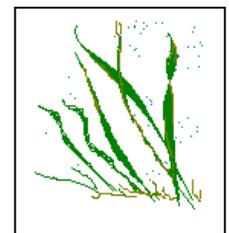
Recent concern over the historical losses and potential future losses of eelgrass habitat in the Strait of Georgia led to the formation of the Eelgrass Conservation Group (ECG) in the fall of 2001. The group is now named the Seagrass Conservation

Group, a title that may be temporary. Interest from community members along the west, central, and north coast of British Columbia led the group to expand their range to cover the entire coast of B.C.

Alliances with several groups in Puget Sound are developing, and it is hoped that additional

alliances will form over time.

(see pg. 2)



Conservation Efforts (cont.)



Members of the SCG include representatives from government agencies, First Nations, stewardship groups, universities, and local consultants.

The SCG initially identified three topics to address:

Inventory (Mapping)

The location of eelgrass habitat in B.C. is poorly documented. Several areas have been mapped by various groups using various methods. The majority of the mapping information was collected in the 1970's and 1980's, and may not reflect current conditions. A map of current eelgrass habitat is required to assist with conservation efforts.

Monitoring

An eelgrass monitoring program, designed to track nearshore health over time, could potentially detect habitat impairments requiring mitigation.

Public Awareness & Education

Anchoring, recreational shellfish harvesting, propeller scour, dock construction, water quality degradation, and trampling by people carrying kayaks at low

tide have led to losses of eelgrass habitat in B.C.. A public education campaign could help to reduce further losses.

Over the last year we have begun to address these issues through the development of manuals and a series of workshops along coastal B.C..

A four-level mapping and monitoring protocol was developed to enable groups to contribute reliable and consistent information to a central database. Eleven stewardship groups, the Canadian Wildlife Service, Parks Canada, and several graduate students at UBC and Simon Fraser University are currently collecting data using the protocol. The protocol is available from Cynthia Durance at precid@shaw.ca

If you would like a glossary included in the manual, please e-mail Cynthia a list of terms that you would like to have defined.

SeaChange Marine Conservation Society received funding from Environment Canada, foundations and private donations to assist twenty coastal community groups in B.C. in the inventory and stewardship of eelgrass beds. A manual for eelgrass stewardship has been developed for groups or individuals working on eelgrass conservation. For more information on the *BC Coastal Eelgrass Stewardship Project* contact:

Seachange@axion.net



The SCG is in the early stages of development and welcomes participation from everyone. If you would like to be added to the electronic mailing list, be advised of upcoming meetings, or give a presentation, please contact Nikki Wright: seachange@axion.net

"Alliances with several groups in Puget Sound are developing and it is hoped that additional alliances will form over time."



Notes from Cortes Island by Sabina Leader Mense

Sabina Leader Mense is the coordinator of a Marine Stewardship Program for the Friends of Cortes Island (FOCI), a local non-profit society. Here are examples of what she has going for community volunteers who work on the Cortes Island Foreshore Monitoring Project. These examples may inspire you to establish a supportive volunteer network in your area.

“I am paid approximately \$2,000-\$2,500 per year to coordinate the foreshore

monitoring project. I coordinate all other projects; community education, marine watch and foreshore mapping on a volunteer basis. I am a marine biologist by training, and have an avid interest in the local marine environment.

I have an exceptional team of volunteers who have been with me for over seven years. I have approximately twelve members ranging in age from 26 to 76. They are all permanent residents of our island

community (1,000 pop.). They are all interested in the marine environment and came knocking on my door.

- They all wanted to learn how to carry out scientific monitoring as a way to contribute to local marine conservation; they feel empowered with this knowledge.
- They are plain keen to learn about local marine life and get out on the foreshore and in boats on the water. I take them (see pg. 4)

“I have an exceptional team of volunteers... ranging in age from 26 to 76”

The Search for Introduced Eelgrass – *Zostera japonica*

It is believed that Japanese eelgrass, *Zostera japonica*, was accidentally introduced into the waters of Washington State with oyster spat imported from Japan. The species has since expanded its range northward and southward along the coast. It was first identified in B.C. near the U.S. border several decades ago. Since then it has gradually spread northward.

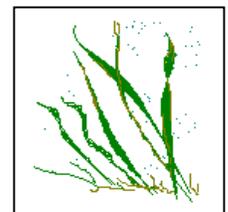
The Japanese eelgrass does not pose a threat to the native species as it has a slower rate of

growth. It usually occupies areas that are not quite suitable for *Z. marina*, often due to elevation. It has, however been responsible for declines in foraging habitat of shorebirds, as the presence and density of the plants may lead to changes in the invertebrate community within the mud or sand substrate.

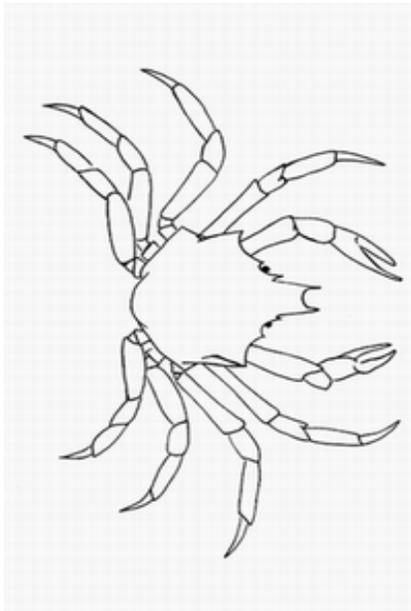
There are very few reference collections, and I have only seen it as far north as Campbell River. In order to document the distribution and spread

of *Zostera japonica* I would like to invite everyone to send me samples if they think they have found it. Remember, the sheaths of *Z. japonica* are not entire and therefore do not tear when the outermost leaves are slowly pulled in opposite directions. I can verify whether it is in fact *Z. japonica*, and if so, I will submit the sample to the UBC Herbarium crediting the person who collected it.

Collections should include a few shoots (10) with rhizomes attached. If you send fresh material in a zip lock bag, I can verify the species and then press and dry a few shoots for the herbarium. (see pg. 4)



Cortes Island (cont.)



Artist: Julia Sigwart

out on what I call training tides and we just explore together. I also invite them along on all tidework that I am involved with throughout the year in addition to their monitoring tides.

I arrange an annual field trip with them. We travel to the west coast of Vancouver Island exploring marine areas at low tide, expanding our knowledge of west

coast marine life. We do this at our own cost.

- We get together for waffle brunches and pull together the data binders that we update annually. We also enter the local sand castle contest and build quadrats with amazing barnacles and chitons all made from sand.
- I open up my marine reference library to

them and annually purchase new field guides and references in marine science with FOCI funds. They also have use of the project microscope.

- I ask them to teach alongside with me when I offer community tide walks and dock talks; and they are as proud as can be to do this.

That's what I do on Cortes.

Zostera japonica (cont.)

In order for me to submit a reference collection to the herbarium, I will need the following information: date specimen was collected, location (as specific as possible), longitude and latitude, and name of the person who collected it. This information will be entered into a herbarium database to produce a label for the specimen, and may be used by scientists around the world who are studying the species.

:Specimens should be sealed in zip lock bags with a damp paper towel and mailed to:

Cynthia Durance

Eelgrass Study

3622 West 3rd Avenue

Vancouver B.C. V6R 1L9

Please don't hesitate to call (604) 734-5048 or e-mail (precid@shaw.ca) me if you have questions.

We will report on new collections and range extensions in future newsletters.



Eelgrass Education at BMSC by Megan Saunders

The Bamfield Eelgrass Stewardship Project had a busy summer doing research, mapping, and developing educational programmes. We have incorporated eelgrass education into our already existing education programmes, developed a number of written materials, and participated in outreach events. Our project is based out of the Bamfield Marine Sciences Centre's (BMSC) Public Education Programme.

Over 2000 individuals in high school, university and special interest groups visit BMSC for 2-7 day field trips.

Eelgrass education has been incorporated into our "*Oceanography of Grappler Inlet*" field trip. We have developed a field guide of common eelgrass meadow inhabitants, to be used in conjunction with viewing boxes from a boat. The field trip is a great opportunity to introduce

eelgrass ecology and conservation. We have also produced a variety of written and "hands-on" educational material. "Mitchell's Eelgrass Adventure," a children's book written and illustrated by Vilaiwan Fernandes, documents Mitchell's snorkeling explorations of an eelgrass bed. It is currently on display at the BMSC and Bamfield Community School Libraries.

An eelgrass activity book with crosswords, word searches, mazes, paint-by-numbers, and other games was also compiled. A treasure chest of toys representing eelgrass communities and a felt board with removable felt animals are a big hit with small children.

In addition to our in-house education, our group has participated in a number of outreach events. All of the previously mentioned educational tools were available at Port Alberni's Tall Ships Day, and at the Port Alberni

Maritime Museum over the summer. Additionally, we organized an educational event in conjunction with the Huu-Ay-Aht Youth Science Camp in July. Over 25 Huu-Ay-Aht youth from age 5 to 16 were trained to map and inventory eelgrass beds. We are currently adding eelgrass information to the OceanLink website (www.oceanlink.island.net), which gets over 6 million hits annually.

Thanks to the many Bamfield residents, Huu-Ay-Aht youth, high school work experience students, BMSC summer students and GIS experts who have logged nearly 400 volunteer hours for this project. If you would like to access any of the previously described eelgrass educational materials, or would like further information please contact Anne Stewart at 250.728.3301 extension 226.

Megan Saunders

HIDDEN IN THE EELGRASS WORDFIND

FIND ALL THE EELGRASS WORDS!
CHECK THE BACK COVER FOR THE ANSWER

S O X Y G E N C R H Y K U Z I
N P H R Z T R T S L C E H U P
I P M J C A M I M E M E Z I B
H S U U B N F N V O H F P F G
C T E S D Y N U T R I E N T S
R R K A L F W M R E F E Z J W
U P E L S E G G S I H L A Y O
A O E T V T T U S G S G R R C
E J S G L A A H G N I R R E H
S D J N T E D R A M F A M S M
F A S I A O H B S H N S F R E
K T B T O I A S N R Y S S U A
V A S F O V L N A E C O B N D
H W L L K O U S D F N H M Y O
M B H N A E R B D Q C G X K W

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|---------|-----------|------------|
| CRABS | EELGRASS | EGGS |
| FISH | FOOD | HABITAT |
| HERRING | JELLYFISH | MEADOW |
| MUD | NURSERY | NUTRIENTS |
| OCEAN | OXYGEN | PIPEFISH |
| ROOTS | SEASTARS | SEAURCHINS |
| SHELTER | SNAILS | |

