



## Island County Marine Resources Committee

# MINUTES

December 11, 2002, 4:00 – 6:30 pm

Trinity Lutheran Church

Freeland

Audio Recorded

**Present:** Chair Tom Campbell, Hi Bronson, Mike Gallion, Jim Hawley (Roehl alt.), Phyllis Kind, Don Meehan, Sayed El-Sayed, Roger Sherman, Jeff Tate, Dick Toft, Benye Weber, Exec. Director Gary Wood, Admin. Ass't. Dan Pedersen. **Absent:** Martin Behr.

**Visitors:** Jill McKinnie, District Director for Congressman Rick Larson, Everett; Gwenn Maxfield, Ass't Director, Island County Public Works. *From Clinton:* Cindi Hoffman, Joe Hoffman. *From Coupeville:* Jan Holmes, Lucas de Clercq, Agna de Clercq, Sharon Hart. *From Freeland:* Christina Baldwin, Sooja Nehrllich, Wayne Nehrllich, Jerry Shimek. *From Greenbank:* Frank Roberts, Mike Seraphinoff, Jan Holmes, Prescott. *From Langley:* Carol Ryan, Malcolm Ferrier, S.B. Willeford, Jay Ryan, Tom Hutton, Barb Hutton, Clodaugh Valade; Jerry Valade, Dorothy Stubben, Nancy Snow, Peter Bennett, Robert Brodie.

**Call to order:** 4:01 pm, Chair Tom Campbell welcomed the large audience and acknowledged that most probably had come to hear the speaker, Dr. Sayed El-Sayed. Campbell invited El-Sayed to speak first, adding that the MRC's business meeting would follow, and any who wished to stay for it were invited to do so. Synopsis of talk follows these minutes.

**Quorum:** 5:25 pm. Campbell declared a quorum and called the business meeting to order.

**Minutes of 11-6-02. Adopted.** Motion by Kind, second by Bronson, no objections.

**Agenda: Adopted** with these additions. Motion by Weber, second by Bronson, no objections.

- > Reappointments to MRC (Meehan)
- > Election of officers (Bronson).
- > Discussion of meeting schedule for 2003 (Bronson, Campbell).
- > Web site status (Meehan).
- > South Whidbey Record article regarding Nichols Bros' dredging & eelgrass (Meehan).

### Reports:

- > Reappointments. Meehan reported the Island County Commissioners have reappointed all members whose terms were expiring at year-end: Gallion, Campbell, Sherman and Toft.
- > Officer elections. Nominating-committee chair, Hi Bronson, presented this slate of officer nominations for 2003: Chair: Tom Campbell. Vice-Chair: Roger Sherman. NWSC representative: Gary Wood. **Action: Motion by Kind to elect entire slate by acclamation, seconded by Weber, no objections, passed unanimously.**
- > Meeting schedule. Campbell circulated the proposed 2003 meeting schedule by e-mail earlier in the day: Jan. 8, Jan. 22, Feb. 5, Feb. 19, Mar. 5, Mar. 19, Apr 2, Apr. 16, May 7, May 21, Jun. 4, Jun. 18, Jul. 16, Aug. 13, Sep. 3, Sep. 17, Oct. 1, Oct. 15, Nov. 5, Nov. 19, Dec. 10.
- > Web site. Meehan reported that designer, Phil Williamson, is very close to having the redesigned MRC Web site ready to launch.
- > South Whidbey Record article. Meehan expressed surprise that the MRC had not been approached to help mediate between Nichols Brothers and the Department of Fish & Wildlife over Nichols' application for a permit to dredge its launch area for two large boats under construction in their shipyard. A recent article the South Whidbey Record reflected unfavorably on Nichols, when in fact the company has actually been progressive in its efforts to treat storm water, invest

in environmental mitigation and improve the health of Holmes Harbor, and has done a great deal of good. They've even planted shellfish in the bay. After some discussion, members of the committee agreed it might be a good idea for the MRC to prepare a news article about Holmes Harbor and pitch it to local media. Meehan suggested Pedersen might write such an article, but to wait until after the MRC Web site is finished, since it is taking priority at this time.

> Living on the Edge will be the theme of the 2003 Sound Waters University, Saturday, Feb. 1, with about 29 – 30 classes. Andrea Copping of the Northwest Straits Commission is keynote speaker. She'll talk about marine health issues in Island County and Puget Sound.

> Executive Director's Report. Wood reported we've been awarded the full amount of money we were seeking in grants from the Salmon Recovery Funding Board (SRFB) for 2003. The grant includes Shore Stewards, the feeder bluff project, and the regional forage fish contract. Also, our Maylor's Marsh proposal, which was ranked fourth out of four projects by the Island County lead entity, has reached the top seven statewide, which puts it in the "funding group."

> Treated wood in aquatic environments. Meehan reported he recently attended a conference on treated wood and learned that one of the nation's leading experts lives near Port Townsend. He will try to set up a field trip on this for the MRC sometime in the spring.

**Adjournment.** There being no further business, Campbell declared the meeting adjourned at 6:30 pm.

**NEXT MEETING: 4 - 6 pm, Wednesday, Jan. 8, at Heller Road Firehall in Oak Harbor.**

## Saving the Antarctic Ecosystem: A Global Concern

Dr. Sayed El-Sayed, Professor Emeritus, Texas A&M University  
Member, Island County Marine Resources Committee

We are all interconnected. What happens in the Antarctic and the Southern Ocean affects a lot of countries. Antarctica is the land of superlatives – the **coldest** place on Earth (-129 degrees F. July 1983 at the Russian Vostok Station), the **highest** continent (average elevation about 7,300 ft.), the **driest** continent (average rainfall about 2 inches), the **windiest** (up to 200 mph), has the **longest** days and nights, and the **greatest** amount of fresh water (90 percent of all the Earth's fresh water), and is surrounded by the **stormiest** ocean.

Antarctica is land surrounded by water. The Arctic is the reverse.

The Southern Ocean, which surrounds Antarctica, makes up about one-tenth of the World Ocean. Antarctica's sea ice is called **fast ice** and **pack ice**. When it expands in winter it covers 29 million square km; when it shrinks by the end of Antarctic summer (Dec-Mar), it's only 4 million square km. This waxing and waning leads to the description of Antarctica as *the Pulsating Continent*. This pulsating is the greatest physical phenomenon on the surface of the Earth. Icebergs break off the fringing ice shelves and may float for several years, four-fifths submerged.

Many countries claim territory in Antarctica; however, the U.S. has no claims and recognizes none. Under the Antarctic Treaty of 1959, all these countries have put aside their claims for 50 years. So *Antarctica belongs to everybody and to nobody*.

Millions of years ago Antarctica had a warm climate supporting luxuriant vegetation and large animals – abundant dinosaurs and primitive mammals. Evidence is contained in the fossil record and even in the discovery of coal in Antarctica. Today it supports different kinds of life – lichens, mosses, toadstools and liverworts, two flowering plants, a few invertebrates and wingless insects.

Life in the surrounding ocean is incredibly rich. **Phytoplankton** (grass of the sea) is the base of the food chain. **Krill** (*Euphausia superba*) are the main grazing organism and the most abundant animal in the world – the staple food of baleen whales, crabeater seals, fur seals, most fishes,

squids and birds. **If anything happens to the krill, the whole system will collapse – there are no shock absorbers in the system!** In other parts of the world where over-fishing has occurred, something else has moved into the vacuum to take its place in the food chain. But there is nothing to replace krill in Antarctica.

An article in the December 2002 issue of *Scientific American* describes the significance of what is currently happening in West Antarctica, where temperatures are warming and ice is melting. At the current rate, within 50 or 100 years, the melting of this area could cause global sea level to rise 16 feet, affecting land areas worldwide where two billion people live.

Not a single indigenous human group lives in Antarctica. Yet in vivid contrast to the impoverished continent, the waters surrounding it are vastly rich in life. What accounts for the sea's richness is its movement, the currents and temperature differences that cause an **upwelling** of nutrients toward the surface where photosynthesis can occur. Phytoplankton are the grass of the sea, and all flesh is grass.

So why are we so interested in the Antarctic? Why has the National Science Foundation supported my research, and that of other scientists, for all these years? It's because of the world's explosive population growth, the lack of sufficient resources, and the decimation of successive species of marine life to feed the world's population. Among the world's nations, the "have-not" nations rely much more heavily on the ocean for their food than the "haves" do.

That's why it's so essential to save the krill – because it is the organism on which every other Antarctic creature depends for life. The biomass of krill in the Antarctic is greater than any other organism on earth, including the human population.

Of the creatures that live in Antarctica, there are six species of penguins that breed on the continent or on adjacent islands or the fast ice anchored to it. There are also several types of seals, of which the fur seal was nearly exterminated but is now making a recovery, and several types of whales which have been hunted nearly to extinction and are under varying degrees of protection by international agreement.

Man's impact on the Antarctic has ranged from over-fishing to the introduction of cats, rats and reindeer; to oil pollution, to DDT, to weather modification through the greenhouse effect -- ozone depletion, caused by chlorofluorocarbons (CFCs). CFCs are used in air-conditioning, refrigeration, spray cans, insulating foams and plastics and industrial solvents. On average, one CFC molecule survives nearly a century before giving up its chlorine, so if we stop adding to the problem today, it could be 100 years before we see improvement. Ultraviolet radiation (UV-B), which is made worse by destruction of the ozone layer, causes skin cancer and melanoma, impairs the human immune system, and causes cataracts.

In 1978, a distinguished group of scientists from all over the world came together at Wood's Hole, Massachusetts, with Dr. El Sayed as convener, to work together to stop the decimation of Antarctic resources. They obtained a grant from the National Science Foundation and were hosted by the National Academy of Sciences. As a result of their talks, the group adopted BIOMASS, Biological Investigations of Marine Aquatic Systems and Stocks, and then went back to their countries to lead the effort to conserve the Antarctic marine ecosystem from further abuse. In the process, they were able to mount two international expeditions in which 14 – 16 research vessels were involved. Their focus especially was on krill, the keystone of the entire food chain. As a result of their work, the Antarctic Treaty established a marine resource committee. Today, Antarctic resources are regulated by this body and are not in the hands of individual nations.

Antarctica now is being heralded as a model for exploration of other frontiers, such as space.