

NEWSLETTER WINTER 2005

COCOLALLA LAKE ASSOCIATION

OUR MISSION: "TO HALT AND REVERSE THE EUTROPHICATION PROCESS IN COCOLALLA LAKE"

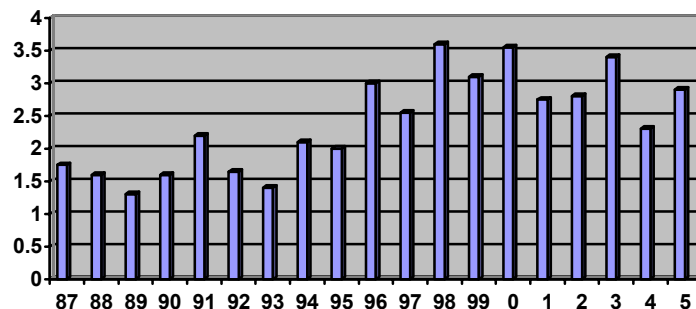
WEBSITE

We have a website where you can review this newsletter and other association information. Please review it at www.cocolallalakeidaho.com. If you would prefer to not receive this newsletter in the mail and would rather review it on the website or would like to receive the newsletter e-mailed directly to you, please e-mail Glen Weatherly at weathgb@msn.com.

The Lake Association would like to thank Kathy Dingman from Panhandle Lakes Resource Conservation & Development Council, Inc. for developing our new website. She is doing a great job and we really appreciate her efforts.

LAKE CLARITY FOR 2005 (by Cary Poston)

AVERAGE OF CLARITY TESTS BY YEAR IN METERS



MEMBERSHIP REPORT (by Sonia Gladish)

As of 12/23/2005, the Membership Chairperson, Sonia Gladish reported that the Association has 111 members.

Due to our milfoil and algae problems with the lake, plus other expenses, our dues have been raised to \$25.00 annually. I will send out notices in January.

EURASIAN MILFOIL CONTROL (by Bonnie Anderson)

In August, we received notification that the sample we had sent to the University of Idaho was indeed Eurasian Milfoil. We have been on the alert for it as most of our neighboring lakes are in the process of treating it or trying to come up with funds to treat it. Eurasian Milfoil is an invasive, rapidly spreading plant that can form large floating mats of vegetation on the surface of the lake. It is not native to the United States but is native to Europe, Asia and northern Africa. If we do nothing, it will spread rapidly and soon boat traffic, swimming and water recreation will be severely hampered. How did we get it? It probably came from boats or birds coming into our lake from other lakes that have Eurasian Milfoil. A tiny piece, tucked under a boat propeller or a piece on the foot of a duck can start the infestation. Now the question is what we do about it. We had an informational meeting on October 25th at the Southside School to present some of the issues we are facing. Since then, we have had additional items come to our attention. Let me state what we know at the present time. Things change rapidly so what I am saying today may be old news tomorrow.

1. We need a chemical application on about 50 to 60 acres of Eurasian Milfoil in the lake.
2. This chemical application will be done, hopefully, in the spring of 2006.
3. Once you have Eurasian Milfoil it can never be completely eradicated. The chemical application, we are told, would put down the majority of it and then we would have to use divers to hand pull it each year. Hand pulling by divers means just that, they have to pull it and then suck the plant up in a vacuum apparatus.
4. There are several different kinds of chemical applications. The one that the lake association is learning towards is 2,4-D. However, this chemical has not been widely used in Idaho – in fact it is our understanding that it has only been used twice in Idaho, both times experimentally. Both times were very successful. We have been told that other states are using it with good success and that EPA has approved it for aquatic use. Our lake association will push for 2,4-D but the final decision on what is used will be up to Bonner Weed Control and the State of Idaho.
5. We are told that the cost of this full lake application could be around \$55,000 to \$60,000. The hand pulling each year could run around \$5,000 a year. These figures are estimates. The exciting news is that we may receive \$30,000 through a grant from the Department of Agriculture **if** we can come up with the remaining \$25,000. We will be notified in April. This is **tremendous** - this kind of opportunity does not come along often. It means that we, our lake community, must come up with this money to make it happen. I believe we can do it!! Our lake is at a crossroad – we have some big decisions to make now or it may be too late or too costly later.

SPECIAL PUBLIC EURASIAN MILFOIL MEETING (by Bonnie Anderson)

On October 25th, the Cocolalla Lake Association had an informational meeting at the Southside School regarding the invasion of Eurasian Milfoil in Cocolalla Lake. Guest speakers were Doug Freeland, who is owner of Ace Diving and a member of the Milfoil Task Force for the State of Idaho, and Leslie Marshall and Brad Bleumer of Bonner County Weed Control. Doug Freeland explained that Eurasian Milfoil cannot be eradicated with any of the means we have at our disposal at the present time. A chemical treatment is usually done on the lake initially and then hand pulling by divers is done every year as maintenance to keep the milfoil at a controlled level. Diving is done by professional divers with a vacuum device that sucks the plant into the apparatus as the plant is being pulled. He explained that there is a difference between chemical treatments and gave an example of Horseshoe Bend Mill Pond, which had to be retreated with 2,4-D after the first treatment of another chemical was ineffective.

Leslie Marshall talked about Eurasian Milfoil and the role Bonner County Weed has in the treatment area. She is the Director of Bonner County Solid Waste, Weeds, Waterways, Parks and Recreation and is an expert in the cost and funding of milfoil treatments in this county. Brad Bleumer, of Bonner County Weed, talked about some of the chemical treatments that have been used on the lakes in this area and the results of those chemicals.

Cary Poston, a volunteer in the lake monitoring program, explained the probable causes of the algae bloom we have been having in the lake.

Dalmar Vander Meer, a member of the Cocolalla Lake Association Finance Committee, presented the estimated cost of milfoil treatment and the cost of gathering data for a possible alum treatment for algae.

We were pleased that Senator Joyce Broadsword and State Representative Eric Anderson were present at the meeting and appreciated their comments of support at the state level.

We thank everyone who took the time from their busy schedules to attend this meeting. We were encouraged that so many people demonstrated a concern for the lake.

OPTIONS TO CONTROL EURASIAN MILFOIL

MANUAL:

Hand pulling and bottom barriers:

- Used in small areas around docks and beaches
- Expensive and time extensive

Dredging:

- For heavily infested small areas
- Stirs bottom sediment
- Cost is astronomical for large areas

MECHANICAL:

Rotovation (Digging the roots):

- Machine not readily available
- For extremely heavy infestations
- Disturbs sediment badly

Harvesters:

- Removes plants from the water
- Can treat large areas
- Generally have to cut twice or more a year

MECHANICAL WEED CUTTERS (Cut the plants several feet below the surface but does not collect the cut weeds):

- Can work in shallow waters
- Fish habitat is saved
- Would probably have to cut several times a year

LAKE WEED RAKES (Drag on the bottom):

- Hard work and covers a limited area
- Disturbs sediment badly

CHEMICAL:

Renovate (triclopyr):

- Most cost effective for larger areas
- Selectively kills Eurasian Milfoil

Sonar (Fluridone):

- Low toxicity
- Longer contact time
- Requires follow-up with divers and hand-pulling to be successful
- Non selective herbicide
- Can not use water to irrigate for up to 30 days

2,4-D:

- Kills the entire plant
- Selectively kills Eurasian Milfoil
- Fast acting
- Not as effective as fluridone for heavy infestations
- Less expensive

BIOLOGICAL CONTROLS:

Grass Carp:

- Not specific to Eurasian Water Milfoil and will often eliminate native plants which destroys fish habitat

North American Milfoil Weevil:

- A widespread native insect (found in our area in Washington, Idaho, and BC lakes) that feeds and reproduces on Northern Milfoil and Eurasian Milfoil
- Fish predators may play roll in preventing successful introduction of weevils
- There is continued study on the use of weevils

PHYSICAL CONDITIONS THAT AFFECT EURASIAN MILFOIL:

- Colder climates – milfoil dies back to its roots in the winter.
- Drying – the plants will die if dried out completely
- Milfoil generally does not produce mats on the surface in water more than 15 feet deep and usually doesn't grow in water more than 20 feet deep
- In lakes with low water clarity, milfoil does not produce mats in water more than 6 feet deep
- Freezing does not kill milfoil
- Grows best on fine-textured, inorganic sediments and relatively poorly on highly organic sediments

FINANCE COMMITTEE MANAGEMENT FUND

A Finance Committee has been formed to develop a financial plan for treating the Eurasian Milfoil and the Blue/Green Algae problems. The committee is made up of Dalmar Vander Meer Co-Chair, Fred Vincent Co-Chair, Ron Muskopf and Tom McGrath. The committee presented a plan to the community at large at the October 25th special meeting. The committee conducted a financial campaign asking for voluntary pledges from all lake front owners along with interested lake users over a several year period. The committee planned to raise \$25,000 by the end of the year. As of December 31, \$24,900 has been either pledged or the checks received. This amount and the \$30,000 we **hope** to receive from the Department of Agriculture will allow us to have the initial milfoil treatment done in the Spring of 2006. The Cocolalla Lake Association and the Finance Committee

want to thank the generous contributors who have made the treatment possible. The treatment is very important to all of us who own property on the lake and those who want to preserve and use a beautiful lake. The contributors to the fund are:

Norm & Bonnie Anderson
Max & Margery Birdsell
James & Gail Burke
Ron & Rose Chaney
Herman Collins
Larry & Peggy Erickson
James & Susan Flathers
Chuck & Sonia Gladish
Gary & Jonny Guenther
Skip & Jane Harrold
Eric & Shirley Knudson
Larry Little
Rudy & Nellie Mead
Phyllis Mott
Darrell Myers
Mary Neil
Allan & Christine Nye
Cary & Ann Poston
C. Mike Reid
Carol Rivers
Brett & Linda Ryberg
Michael Scardina
Paul & Susan Skogland
Gary & Sally Suppiger
Jonathon & Heather Trana
Jim Van Demark
Dal & Joan Vander Meer
Fred & Shelley Vincent
Glen & Barbara Weatherly
Jim & Susan Whitehead
Brad Wiedrich & Roben Ertter
Heidi Wirth
Ned & Nancy Wogman
Kenneth & Arlene Wood

ALGAE CONTROL (by Bonnie Anderson)

Several times this summer most of you have noticed the pea soup look of the lake. That is an algae bloom. Another article later in this newsletter will explain the reasons for the bloom.

The Cocolalla Lake Association is working on this problem:

On October 5, 2005, several members of the lake association met with Harry Gibbons, Jr. Ph.D with Tetra Tech, Inc. Dr. Gibbons is a Limnologist/Environmental Engineer - Lake & Stream Restoration. He has led 20 lake restoration projects and 14 Eurasian Water Milfoil projects and is recognized by his peers for innovative and comprehensive solutions to lake and watershed management issues. He went over the data that has been collected on our lake and explained his findings and answered questions from the members of the association. His recommendation was that we still needed more information on our lake. He said we needed to take daily samples of wind, rain and lake levels for one year. We also need to take phosphorus samples each month from the incoming and outgoing streams and four samples from the lake at different levels. At the end of that time, he will look at the data we have collected and tell us the next step of the plan. Most likely, at that time he will ask that we take core samples from the bottom of the lake. It appears that we can do the sampling ourselves but, as there is only one laboratory in the United States that runs the tests on these core samples, it is quite expensive. He did say he felt that we would benefit from an alum treatment and that the final determination will be made after the testing is completed. Now here is the down side – an alum treatment may well be in the range of one to three million dollars. Of course, there is no way our small lake community can come up with that kind of money. We will have to apply for Federal and/or State grants when we have all the data. Meanwhile, we need money for the testing etc. We are also looking to purchase a device to measure the wind.

I would like to clarify one thing – the algae bloom and the Eurasian Milfoil are two separate issues.

We need someone to measure the lake level daily. There is a gauge at the bridge on the north end of the lake and we can teach someone how to do it. Also, we need daily rain measurements. If you can help us with either of these, please notify Herman Collins at 263-7282 or Linda Muskopf at 265-0295. Thanks!

ALGAE - THE REASONS (By Cary Poston)

Algae has always existed. It is microscopic and is present in all bodies of water, including your fish tank. It is the basic food producer in lakes.

Some algae attaches to rocks, plants, docks and other surfaces. Others lay on the bottom. A third group, called phytoplankton, float freely through the water column and represents the biggest contribution to the volume of algae in the lake.

One of the more visible of the “nuisance” forms of algae is “blue-green” algae. Along with other forms, it thrives when the water is warming, plenty of sunlight is available, and a source of nutrients exists. Without human intervention, nutrient overloads and resultant algae blooms are unlikely.

Of the nutrients useful to algae, phosphorous presents the greatest threat to water quality. It is the major driver of algae reproduction.

1991 data for Cocolalla Lake show sources of phosphorous to be:

- 63% from tributaries (Fish Creek, Cocolalla Creek, Westmond Creek and Johnson Creek)
- 23% from sediment release from the lake bottom
- 7% from ground water (runoff)
- 5% from the atmosphere
- 2% from septic systems

Some causes of phosphorous pollution include:

- Fertilization (both farm & lawn)
- Soil erosion, including:
 - Breakdown of stream banks
 - Developments
 - Deforestation
 - Road building
- Decay of organic materials (leaves, lawn clippings, etc.)
- Septic system leaks
- Livestock in or near water sources/supplies

Phosphorous getting into the lake, is immediately consumed or settles to the bottom. It is accepted that sediment at the bottom of the lake is rich in phosphorous. During periods when the lake is “turning over”, phosphorous is carried upward in the water column where it joins the warming water and sunlight in feeding the algae and encouraging its growth and reproduction.

Since 1987, members of the Lake Association have been monitoring and testing lake water quality. Typically, from April through November water samples are taken near the surface and the lake bottom and are submitted to a laboratory for analysis. Measurements of phosphorous and chlorophyll are made.

Phosphorous results give an indication of nutrients in the water column. Chlorophyll is a measure of green pigment or the algae in the water. Recordings of temperature and oxygen levels are made from the surface to near the bottom to yield a picture of the stratification of the lake. Water clarity is measured using a Secchi disc – a disc about the size of a Frisbee and is painted black and white. The disc is lowered into the water until it can no longer be seen and that depth is recorded. The Lake Association goal is to get Secchi disc readings of a consistent 5 meters.

From 1987, water clarity has improved from an average of 1.75 meters in 1987 to averages of over 3 meters in 1998 and 2000. 2004 clarity was 2.3 meters. Clarity in 2005 was 2.9 meters.

LET'S REDUCE PHOSPHATES

Many of the residents on the lake and in the watershed use automatic dishwashing detergents. Many of these detergents contain a significant amount of phosphorous. We need to use only low or non-phosphate automatic dishwashing detergents to reduce the amount of phosphorus entering the lake through septic systems. It is known that phosphorus is the leading cause of nutrient loading to streams and lakes.

PHOSPHATE CONTENT IN POPULAR DISHWASHING DETERGENTS:

Dishwashing Detergents	Phosphate Content
Palmolive Gel	1.6%
Cascade Complete: Liquid	4.0%
Cascade Complete: Gel	4.0%
Sunlight Gel	4.3%
Cascade PureRinse	4.4%
Electra-Sol Gel	4.9%
Sunlight Powder	5.6%
Electra-Sol Powder	6.1%
Spot-Free (Wal-Mart) Powder	7.0%
Stop N Shop Powder (Lemon)	7.5%
Stop N Shop Powder (Regular)	7.5%
Cascade Complete Powder	7.7%
Cascade Complete Tablets	8.48%
Sunlight Tablets	8.7%
Electra-Sol Tablets	8.7%
Palmolive Tablets	8.7%

Some of the dishwasher detergents that have no phosphates are:

Shaklee
Bi-O-Kleen
Life Tree
Seventh Generation
Country Save
Earth Friendly Wave
Ultra Citra-Dish

Home Made dishwasher detergent:

Mix 1 cup of borax with ½ cup baking soda.

Laundry detergent:

Remember that some laundry detergents contain phosphates so use those that are phosphate free. Liquid detergents usually do not have phosphates. Fortunately, non phosphate laundry detergents have been shown to clean very well.

IDAHO DEPARTMENT OF LANDS LOGGING OPERATION

Geoff Meek and Ed Anderson of the Idaho Department of Lands took Glen Weatherly from the Lake Association to view the logging operation they are conducting in the Fish Creek drainage. This area was originally harvested in 1995. The current operation is removing the remaining trees leaving the new growth which is growing very well. Approximately 300 MBF will be harvested. No Class I or Class II streams were located in the sale area. There was a small class II stream adjacent but there is at least 30 feet between the stream and the logging area. The access road is graveled and rolling dips are functional. The CLA representative was satisfied that the operation will not be detrimental to the watershed and to the lake. We appreciate the efforts of Geoff and Ed to keep us informed when actions are taken that may affect the lake's watershed.

2005 ANNUAL STREAM WALK CONCLUSIONS

Westmond Creek:

Reach #1

This site is on commercial property. The owner has expressed a desire to improve the stream at this location. Bonner Soil Conservation has been asked to take a look at this reach and give us any ideas for improvement. The Habitat Assessment Score was good on this reach. The Bug Assessment was very poor.

Reach #2

The owners at this reach are also very willing to work with agencies to improve the stream on their property. We were told this area was a “bog” –probably meaning a wetland and many years ago ranchers dug a channel. This is an unofficial report but it does make sense that the banks may still be crumbling as the stream may be attempting to return to its previous state. The bottom here was muddy and mucky to a depth of perhaps a foot or two. The Habitat Assessment Score was poor on this reach. The Bug Assessment was very poor.

Reach #3

This reach is a tributary into Westmond Creek meandering through old growth trees. The “bugs” on this section were still in the poor range but had a better score than the other two reaches on Westmond. It appears that this section could use some bank vegetation for stability. We will work with the owner who is very environmentally conscious to further increase the beauty of the creek, clarity of the water and hopefully increase the bug score. The Habitat Assessment Score was poor on this reach. The Bug Assessment was poor.

Cocolalla Creek:

Reach #1

The owners of this site are into organic farming and rotate where they place their cattle. This may account for the bug scores improving. If we could get the funding, we would like to fence the creek at this site to keep the cattle out. The Habitat Assessment Score was fair on this reach. The Bug Assessment was fair.

Reach #2

This site will not be available to use next year and we want to thank the land owner for allowing us to use it these eleven years. The Habitat Assessment Score was good on this reach. The Bug Assessment was fair.

Reach #3

What a treasure to see water running down this section of creek again! Above this site there was still a section devoid of water but water was coming down another fork of the creek. This area is owned by a lumber company but they have been very conscious about not logging near the creek. It is well shaded with alder, cedar and bushes. The Habitat Assessment Score was excellent on this reach. The Bug Assessment was fair.

FISHING REPORT (by Cary Poston)

Fishing is not a matter of life and death ... it is much more serious than that. Just Google "trout fishing" and the result will be all manner of books, essays and anecdotes available to convince you of this. I even found a new book entitled "The Artful Science of Trout Fishing, written by Dr. John Hayes, a senior trout scientist. The book is available on the internet for \$49.99, plus freight. The man's title alone gets my curiosity up. Was Dr. Hayes ever a "junior trout scientist" or a "mid-level trout scientist" and did he need to obtain his Ph.D to advance to such a lofty position? Who hires a senior trout scientist anyway? Which universities offer Trout Science curricula?" To think I studied engineering, when all along I could have been a trout scientist. Well, we didn't need Dr. Hayes' (senior trout scientist) book this fall. I know I saved \$49.99, plus freight. The trout in Cocolalla Lake were just lying in wait, about 3 feet below the surface. From late September through mid November we have enjoyed what I believe to be the most productive trout fishery in the state. The fish were not as big as I've seen in past years, but their numbers and quality more than made up for it. The typical trout this fall was a rainbow in the 10 to 14 inch category. They struck aggressively and fought as if they were much bigger. An occasional cutthroat and a fish up to 18 inches would grace the stringer. On each outing, one could plan on catching a limit (that's 6 fish for Teri's neighbor) in about an hour. If a friend came along ... or even your spouse ... a limit per each could be had in under 2 hours. The fish experienced very little fishing pressure. That's okay, because it just meant more for me. The word had to have gotten out. It's possible that too many were waiting for their copy of Dr. Hayes' book to show up. What also get my curiosity up is where were all the kids and grandkids? My grandson was never bored this fall. I put a rod in his charge and let him drive the boat at a medium troll and watched him dive for his rod at each strike. The law that all kids under 14 must wear a life jacket is a good thing. The boat is tucked away in the carport now and the ice fishing gear is soon to be dug out.

COCOLALLA LAKE ASSOCIATION BOARD OF DIRECTORS

*Bonnie Anderson – President
(208) 773-5783 (Post Falls)
(208) 263-4176 (Lake)*

*Sonia Gladish-Membership
Chairperson
(208) 263-6515*

*Herman Collins – Vice President
(208) 263-7282*

*Teri McGrath – Social Team
(208) 265-9754*

*Charles Gladish – Treasurer
(208) 263-6515*

*Edwin Nurmi – Agency Liaison
(208) 263-5350*

*Linda Muskopf – Secretary
(208) 265-0295*

*Rudy Mead – Agency Liaison
(509) 747-1210*

*Glen Weatherly – Newsletter
(509) 466-7299 (Spokane)
(509) 710 4828 (Lake)*

*To join the Cocolalla Lake Association, mail this form and the \$25.00 annual membership fee to:
Cocolalla Lake Association
P. O. Box 133
Cocolalla ID 83813*

Name _____

*Mailing
Address* _____

Telephone () _____