



LAKE WISE

... a voice for quiet waters

NEWSLETTER FROM OREGON LAKES ASSOCIATION

DECEMBER 2017

Laurie Carmichael, Newsletter Manager

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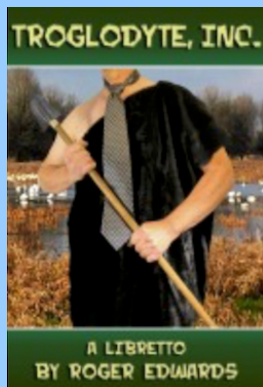
Missed the conference or need a refresher? Read all about the Florence conference, held October 20-21st, with 50 registrants attending.

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2017 OLA Annual Conference Summary

Contributed by Theo Dreher, OLA Board President

Driftwood Shores Hotel conference center, which is near the mouth of the Siuslaw River north of Florence, was the site for this year's annual meeting. As has been usual, our location shaped the program, and in this case there were several presentations on the theme of coastal lakes, streams and watersheds. We merged forces with the Siuslaw Watershed Council, and welcomed the Council decision to consider this conference their October meeting.

This year we changed the program schedule, beginning at noon on Friday with an afternoon session (1-5 pm) followed by an evening session that was open to the public (7-8:30 pm). Saturday's program began with breakfast followed by a scientific session (8:30-noon). A field trip was scheduled for the afternoon. By allowing Friday morning for travel time, the Board felt that this schedule made it easier for people to attend the whole program with only one overnight stay. Spreading the sessions across two days was hoped to keep audience attention from fading. **NOTE: IF YOU ATTENDED THE CONFERENCE, PLEASE LET A BOARD MEMBER KNOW YOUR THOUGHTS ABOUT THIS SCHEDULE.**

Opening our Friday afternoon meeting was **Dr. Alison Aldous** (The Nature Conservancy), who presented the plenary talk and discussed the influence of groundwater on lakes. She has worked on the hydrology of the Upper Klamath Lake catchment area, where about half of the inflow to the lake comes from groundwater flowing from the Crater Lake highlands. In addition she focused on another study, the groundwater status of the coastal dunes area north of Coos Bay. A Weyerhaeuser factory at Jordan Cove that used groundwater in the past has been closed for some time, but recent proposals for a liquified natural gas export facility have renewed the possibility of pumping. Alison described studies modeling the effect of different levels of water extraction on the status of dune-bound lakes and wetlands, and on their flora and fauna.

Three ODFW talks focused on fishes of coastal lakes and streams. **Ben Clemens** made a case for appreciating the lamprey despite its looks. Lampreys have an anadromous life cycle like that of salmon, and are similarly important in depositing nutrients in coastal streams after returning to spawn. Revered by coastal tribes as a plentiful food source, lamprey populations have been classified as vulnerable or imperiled. Numbers are rebounding as we understand their habitat needs, including how small modifications can remove barriers to migration up streams. **John Spangler** described the status of Coho salmon populations of the Siltcoos, Tahkenitch and Tenmile Lake systems, where again populations have made recoveries after early merciless overfishing. **Gary Galovich** discussed

non-native warmwater fishes, whose stocked populations are carefully monitored to provide fishing opportunities without overpopulation and negative effects on lake ecosystems. Illegal stocking can occur if these populations are not managed. **Deborah Yates**, President of the Gardiner-Reedsport-Winchester Bay, Salmon Trout Enhancement Program (STEP), had a table display showing their successes and problems in fostering wild salmon, steelhead and trout recovery efforts.



Right. Deborah Yates, President of the Gardiner-Reedsport-Winchester Bay, Salmon Trout Enhancement Program (STEP). (Photo by Wayne Carmichael)

Dr. Doug Larson, a Portland-based limnologist and writer, gave Saturday morning's plenary talk. Doug showed the value of aerial photography in documenting



Doug Larson, Plenary Speaker, his wife Kristie and OLA newsletter manager Laurie Carmichael. (Photo by Wayne Carmichael)

changes over time, in this case development around lakes close to Oregon's central coast. Beginning in 1968, and up until 2000, he made periodic flights to document lake status. His photo-based records of both natural and human related changes were sometimes controversial as they revealed the consequences of unwise and exploitative land-use practices.

Dan Carpenter described the Siuslaw Watershed Council's strategic plan for improving habitat in support of Coho recovery in the Friday evening session. A major force in the degradation of habitat in small streams was the use of splash dams, hundreds of which were used in the Siuslaw watershed. Temporary dams held back water to float logs harvested from the valley. Dams were opened, or in some cases simply dynamited, to allow a torrent to surge downstream, carrying logs to estuaries for recovery. Downstream reaches of valleys were often scoured to bedrock. The Siuslaw Council has prioritized sites for rehabilitation, but recovery efforts are expensive and will need to be spread over a considerable time period. **Paul Burns** (US Forest Service) described one such recovery over the last 3-4 years (Fivemile-Bell), in which a farmed valley-bottom pasture was purchased, and major earth-moving work was conducted to convert the channelized stream into many braided channels. Fallen tree trunks were placed across the valley by helicopter, and hundreds of thousands of a wide variety of native plants were planted. After a major rainfall, even before vegetation had been able to cover much of the soil, stream flows were low enough to prevent turbidity and the movement of silt that can choke Coho and lamprey spawning sites. The cost of this project was about \$1.6M. A small group braved the stormy and wet weather on Saturday afternoon to inspect this impressive rehabilitation site.

Moving away from coastal lakes, three talks focused on terminal dryland lakes in Eastern Oregon. **James Pearson** (USFWS) and **Tamara Wood** (USGS) described modeling studies aimed at control of the common carp infestation of Malheur Lake. The carp disperse sediment into the water column, preventing light penetration in support of aquatic vegetation and phytoplankton primary producers. Pearson found that a commercial fishery could remove much of the standing stock, but that augmentation with a second control method, such as egg electroshocking to prevent efficient hatching, would be needed to control populations. Wood proposed that the establishment of islands across the center of the shallow lake could function as windbreaks in preventing wind-driven turbidity. **Susan Haig** (USGS & OSU) discussed the importance of Lake Abert and other Great Basin lakes and wetlands for breeding and feeding habitat for a multitude of birds, some of which migrate seasonally to

different parts of the basin, while others use lakes such as Abert as fattening stops on long-distance migrations. A poster by **Ron Larson** included data that documented a delayed and limited recovery of bird numbers at Lake Abert in 2017. This occurred after the lake nearly dried out in 2014, with recovery dependent on the brine shrimp and alkali fly populations that birds rely on for food sources.

A problem affecting lakes in all areas is the threat of invasives. **Rich Miller** (PSU, OLA Board member) described the Oregon Lake Watch Program and its monitoring of invasion threats by plants (*Cabomba caroliniana* or fanwort) and other organisms (e.g., Zebra and Quagga mussels). Early intervention is critical in preventing the establishment of large enough populations that can make eradication implausible. Troublesome invasive weeds along the Willamette River are *Ludwigia hexapetala* (Uruguayan primrose) and *Nymphoides peltata* (yellow floating heart). **Marci Krass** (Willamette Riverkeeper) and **Melissa Newman** (Benton Soil & Water Conservation) discussed control approaches for these and other threats toward improving the natural habitat of the Willamette River.

Addressing one of the key roles of the OLA, OLA Secretary **Wayne Carmichael** presented an overview of the scholarship program that is intended to support student-led research on Oregon and Pacific NW lakes. We were pleased to see a good number of student attendees and presenters at this conference. Two recent scholarship

recipients presented talks on their research. **Arianna Chiapella** (PSU, 2016 scholarship) described the insidious ubiquity of mercury in lakes, including remote alpine lakes, resulting from atmospheric deposition. Arianna studied lakes in the North Cascades (WA), looking at local effects, trophic structure and diet in influencing mercury levels in fish. **Christina Murphy** (OSU, 2017 scholarship) described her studies on zooplankton populations—which are important food sources for Chinook salmon—in response to reservoir management in the Willamette basin. In recent years, as Fall Creek Reservoir has been drawn down to the stream channel during winter, *Daphnia* zooplankton have shown a strong June pulse capable of supporting salmon.



Steve Wille, boat captain and past OLA President, doing what retirees do best. (Photo by Wayne Carmichael)



From Left. Arianna Chiapella (PSU, 2016 scholarship winner), Angela Strecker (PSU faculty and Arianna's advisor), Christina Murphy (OSU, 2017 scholarship winner), and Song Yee, Chrissy's daughter, OLA enthusiast and our predicted 2040 scholarship winner. (Photo by Wayne Carmichael)

Poster presenters, during the meeting, were **Laura Costadone** (PSU), **Crysta Gantz** (PSU), **Stephen Hager** (Florence), **Ron Larson** (USFWS, retired), **Gwen Bury** (OSU) and **Dick Lycan** (PSU).

A special thank you goes to **Dylan Bedortha**, area representative for Yellow Springs Instruments/Xylem in support of their presence and Silver Level corporate sponsorship. <https://www.oregonlakes.org/Sponsorship>

Thanks again to all presenters and attendees for an informative and successful conference. Hold the date for next year's joint conference with our Washington Lake Protection Association (WALPA) friends in Portland on September 27th and 28th.

Oregon Lakes in the News

Contributed by Paul Robertson, Former OLA President



Aerial view of East End of Cultus Lake 8/23/95.
Photo Courtesy USFS

Name Game

Lakes around Oregon have a myriad of names, some old, some relatively new, some just recycled. Clear Lake anyone? The online *Atlas of Oregon Lakes* shows 12 (<https://aol.research.pdx.edu>). However, beyond our affinity to name things simply after those that “discovered” it, there is often a more telling tale. Indeed from Cultus to Crater our habit of naming a geographic fixture is often most illustrative of the knowledge base or current thinking of the era. Check out whether the story behind your favorite lake is featured in the recent Oregon Live’s Travel section.

http://www.oregonlive.com/travel/index.ssf/2017/06/how_oregon_lakes_got_their_names.html

Four, Zero! Hike, Hike, Hike!

Not a football fan and looking for interesting ways to spend your Sunday afternoons? Consider tackling part of the Oregon Skyline Trail. A now much less famous predecessor to the Pacific Coast Trail, the Oregon Skyline Trail actually takes you past lakes versus trying to

avoid them. Complete the whole trail and you will have seen 40 lakes. That is four, zero! That is more lakes than most will see in a lifetime, pigskin fan or not. Read more at the *Statesman Journal*.

<http://www.statesmanjournal.com/story/life/2017/10/14/hike-pct-overlooked-cowhorn-peak/106560356/>

That’s a Mine!

Controversy boils around a former mining site. The high desert of Oregon continues to be a hotspot for development and as a result a legacy mine in Bend has been at the center of a decade long ordeal. Now final steps are being taken to convert the old mining area into a private water ski course but some neighbors of the mine are not enthusiastic about the plan. The *Bend Bulletin* has been following the story of what an imaginative name gamer might think to call “Mineski Lake”.

<http://www.bendbulletin.com/localstate/5680501-151/private-lake-for-water-skiers-draws-controversy>



“Bri Cadwell stands near the contentious ski lake, one of two lakes in the proposed Tanager community. The proposed development, which would include 19 high-end homesites situated around the lakes, will be the subject of Monday’s Deschutes County land use hearing.” By Andy Tullis/*Bend Bulletin*

Excerpt from Troglodyte, Inc., a Libretto

Written by Roger Edwards, Former OLA Newsletter Editor and Former Board Member

Roger did an outstanding job of creating and publishing the Lake Wise for 10 years. When he retired from that task, he turned his energies to creating the libretto excerpted here. The entire work is available at <https://www.smashwords.com/books/view/643133> See if you don't agree that enjoying a daily view of our local lake helps us ignore the problems lying just beneath the surface.

act 2 scene 6 [Trog is bustling about the trading post when Chief enters.]

Chief: Trog! Is it you who has poisoned the lake?

Trog: Chief! Give me a pinch to make sure I'm awake.

I've thought of you often since you last left this place

We've always expected that your steps you'd retrace.

Missus is well and is not far away

How delighted she'll be to greet you this day.

Why was your return delayed for so long?

Chief: Thought of our farewell still was too strong.

Then the sadness of parting gave way to cheer

For you were a friend that we held very dear.

The many good memories came to the fore

And we came back to honor this hallowed shore.

But we found that the lake is now sour and rank

And it seems it is you for this we must thank.

Trog: Yes you are right, the lake's not as clear

As it once was when first we came here.

The change that's occurred is glaring to you

Because you've not enjoyed our daily view.

Chief: Trog, I am confused and don't know what to say.

We thought you were dead and had come here to pay

Respect in your honor, which we held as this lake

A composite of goodness, and all that is great.

But the lake doesn't match the vision we had

So we sought to berate who had made it bad.

But it is you, who never had died

Who degraded the lake as it became citified.

I'm so pleased to see you, yet I lament for the lake.

Your town is a wonder, and it's your real namesake.

Trog: The lake's still a treasure, 'though we take it for granted.

We've too many distractions that keep us enchanted.

There are duties of family and civic good

Plus attending to business and our livelihood.

The discovery of new methods and things

Keeps our cultural climate on an upswing.

Yet I still recall my sense of awe

When the lake first appeared as we climbed from the draw.

The sweep of the vista was stunning to see

And brought this hungry savage down to his knee.

That moment was brief, but it stands in my mind

Its image untarnished by the passing of time.

Then I was injured and cast off from the clan.

And that has to be when the trouble began.

We set up a shelter on the lakeshore

And came to rely on the lake more and more.

It provided our staples and absorbed our trash

Until it responded with this smelly backlash.

You wanderers practice the same give and take

But by moving your impact is not as great.

We settlers must learn to live with more care

To protect the land, the water and air.

I've come to think anything that we try
Can be achieved, although we'll never fly.
New ideas and work will get the lake fixed
As soon as we find the appropriate tricks.

Chief: The lake is not broken. It is angry and sad
About the neglect and poor treatment it's had.
With thoughtful attention and the reverence it's due
Its color will change back to its former hue.

Trog: That's a simple approach, which might even
succeed

In ridding the lake of this irksome stinkweed.
Still you must understand we have no guarantee
That all of our days here will be carefree.
Lake restoration can be put in the queue
But there are other things there that we must attend
to.

Chief: That is a fair commitment for I do realize
How events in all our lives force us to compromise.

[hesitation]

I don't mean to press my values on your set routine.

Trog: Don't worry. All of us here will give a cheer
when the lake is clean.

So how have you been? You're looking quite spry.

Oh wait. That was Missus who just flitted by.

Let me go fetch her, I'll be back in a flash.

We all have some tales that we need to rehash.

[departs in pursuit of Missus]

act 2 scene 7 [Chief moves downstage. The curtain closes as he speaks.]

Chief: I have seen the future and the vision brings
me pain.

For it shows that all I've done has been done in vain.
I've lived the life my father lived, as he has done before.
The deeds that we accomplished honor our ancestors.
The paths we trod have also felt the footsteps of our
fathers

Whose spirits guide the travels of all their sons and
daughters.

But my offspring will not recall the counsel I have giv-
en.

All their ties to the past will surely soon be riven.

The wonders that surround me here are indeed compel-
ling.

A fool would view them and remain within his father's
dwelling.

So it becomes the forebears lot, to be buried and forgot-
ten.

Their legacy cast away, even though so dearly bought-
en.

But in their own way, the things we achieved, are every
bit as grand

And let it be said to our credit, or curse, we did not de-
spoil the land.

[Chief departs the stage as the house goes dark.]

Harmful Algae Blooms (HABs) Corner

Contributed by Wayne Carmichael, OLA Board Secretary

NATIONAL AND LOCAL FRESHWATER HAB NEWS HAPPENINGS

National HAB News:

The most recent USEPA Freshwater HABs Newsletter

with updates on all things cyanoHAB-related can be
found at: [https://www.epa.gov/nutrient-policy-
data/cyanohabs-newsletters-2017](https://www.epa.gov/nutrient-policy-data/cyanohabs-newsletters-2017)

To sign up for the newsletter (and for HABs-related
questions) please send an e-mail to
epacyanohabs@epa.gov

Recent and Upcoming Webinars and Meetings

- **HABs Collaboratory: Current and Emerging Technology in the Great Lakes**
November 14, 2017, 11:00 AM EST
- **EPA Tools and Resources Webinar: Monitoring Cyanobacteria with Satellites**
November 15, 2017, 3:00 PM EST

CONFERENCES

- **9th Symposium on Harmful Algae**
November 11-17, 2017
Baltimore, MD
- **19th International Conference on Harmful Algae**
December 18-19, 2017
San Diego, CA
- **SETAC Europe—Global Challenge of freshwater and marine harmful algal blooms**

(HABs): treatment, detection, toxic effects, risk assessment and management

May 13–17, 2018
Rome, Italy

Local HAB News:

The Freshwater HAB season in Oregon is pretty much at an end with most advisories having been lifted. Those HAB advisories still in effect can be seen at:

<http://www.oregon.gov/oha/PH/HEALTHYENVIRONMENT/RECREATION/HARMFULALGAE/Blue-GreenAlgaeAdvisories.aspx>

For these informative news items and more why not join OLA and receive this information in a timely fashion, and as a bonus, be able to participate with discounts. Join at:

http://www.oregonlakes.org/Join_OLA

Gary Larson, Former OLA Secretary and Board Member

Contributed by Sam Brenkman, National Park Service, Bob Hoffman, U.S. Geological Survey, retired, Bob Hughes, Amnis Opes Institute, Barbara Samora, National Park Service, and Angela Strecker, Portland State University



Dr. Gary Larson died suddenly on October 3, 2017, of cardiac arrest. This came as a shock to all of us who knew Gary as a big guy with a big smile and laugh, who was also an especially enthusiastic walker. Gary received his B.Sc. in Fisheries (1966) and M.Sc. in Limnology (1969) from the University of Washington, and his Ph.D. in Zoology (1972) from the University of British Columbia. His research passion beginning in those years was montane limnology, particularly zooplankton ecology and the behavioral ecology of freshwater fish and amphibians. Gary began his post-graduate career as a Research Professor at Oregon State University focusing on the toxicology of chloramines on crayfish. He then worked for the National Park Service in Great Smoky Mountains National Park (1977–1981) as an Aquatic Ecologist, and in the Midwest Regional Office (1981–1984) as Regional Chief Scientist. During and following that period, Gary published several insightful articles documenting the displacement of native Brook Trout by non-native Rainbow Trout in small Appalachian streams. In recognition of his contributions, he received an Honor Award for Superior Service from the U.S. Department of the Interior in 1981. But Gary's love of the Pacific Northwest brought him back to Oregon, where he was a Research Aquatic Ecologist in the National Park Service Cooperative Park Studies Unit at Oregon State University (1984–1993) and the U.S. Geological Survey (USGS) Forest & Rangeland Ecosystem Science Center (FRESC; 1993–1996) in Corvallis, Oregon. From 1997 until his government retirement in 2006, Gary was a FRESC Research Manager, and also a FRESC Acting Co-Director in 2003. He was a USGS Scientist Emeritus until 2016.

While in Oregon, Dr. Larson led two ground-breaking research programs. The first was the long-term monitoring and assessment of the water quality and ecology of Crater Lake (Crater Lake National Park; 1982–2007), which led to the publication of two special journal issues: *Lake and Reservoir Management* (1996) and *Hydrobiologia* (2007), in which

Gary was either senior or junior author of 16 articles covering topics ranging from water quality to fish ecology. Those studies documented the results of 10 and 20 years, respectively, of the monitoring of Crater Lake natural processes and their effects on lake water clarity and quality. They resulted from Gary's impressive knack for leveraging limited funds and others' scientific curiosity into a major systematic investigation. In recognition of his many contributions, Gary received the Pacific Northwest Regional Office Appreciation Award for Outstanding Assistance to Crater Lake National Park in 1987, the Research Scientist of the Year Award from the National Park Service in 1995, and the Superior Service Award from the National Park Service in 2006. He also received Star Monetary Awards from the US Geological Survey in 2003, 2004, and 2005.

The second research program centered on the ecological effects of introduced trout in National Park lakes. That research incorporated a program review by independent scientists and generated 11 journal publications documenting the multiple negative effects of non-native trout on lake food webs and amphibian behaviors. At Mount Rainier National Park, Dr. Larson worked with park staff for over two decades to collect the first dataset describing basic ecological conditions of park lakes, which serve as an important benchmark for tracking long-term change in the park. Through these studies he also assisted the park in developing specific management actions to restore natural lake conditions. Gary was also involved in proposing and motivating aquatic research in North Cascades National Park, and worked closely with the staff of the National Park Service's North Coast and Cascades Network and Klamath Network in supporting and participating in the development of their montane lake inventory and monitoring protocols and programs.

From the 1980's to 2000's, Gary provided key research and management contributions to the fisheries and aquatic programs at Olympic National Park. In 1987, Gary led some of the first limnological studies of mountain lakes in the park. In 1996, he assembled a scientific panel and co-authored a comprehensive report that was a catalyst for additional monitoring and management of Lake Ozette Sockeye Salmon. His efforts ultimately contributed key information to the federal listing of Ozette sockeye as a threatened species. In 2002, Gary assembled and chaired a panel of experts to address the status of Lake Crescent trout populations. The recommendations from the expert panel to the Park Superintendent led to key changes in fisheries management of the lake and generated future monitoring and research.

Gary also worked with park staff to co-author a journal article on federally threatened Lake Cushman Bull Trout.

As indicated by his publication productivity and awards, Gary was one of the few scientists who could both serve as an upper-level manager in a federal science center and publish consistently. As a thoughtful Research Manager, Gary helped guide the FRESC through some difficult times and make the center one of the most productive science centers in the USGS. Gary was a caring, supportive, and enthusiastic mentor to many graduate students and young professionals who went on to develop successful research and management careers in natural resources science at local, regional, and national levels. In the context of these accomplishments, Gary's focus was always to better understand and protect the natural world and the resources he deeply cherished.

After retiring from FRESC, Gary was keen to stay active in the field of limnology. Gary served on the Board of Directors and was Secretary from 1993-1995 and 2015-2016 for the Oregon Lakes Association. He was also on the Advisory Board of the Center for Lakes and Reservoirs at Portland State University. Ever the researcher, one of his retirement projects was compiling a large database of zooplankton assemblage composition in mountain lakes of the USA and Canada, largely from unpublished paper reports. Ultimately, with Gary's persistence and infectious love of limnology, the database grew to include over 1200 lakes that covered almost 30 degrees of latitude. A collaborative publication that employed this important dataset is currently in revision.

But Gary was much more than a highly productive scientist; his greatest love was reserved for his wife Ingrid, his two daughters and sons-in law Andrea (Jon) and Maria (Chris), and his four grandchildren, Torbin, Tobias, Solveig, and Rasmus. Gary also enjoyed music and folk dancing, the warm camaraderie of friends and colleagues, the conviviality of sharing good food (especially Ingrid's home-cooked meals) and good wine, enthusiastic and meaningful conversation, good jokes and laughter, and sharing in the adventures of the people who populated the landscape of his life. In addition to the challenges of limnological research, Gary also delighted in self-remodeling his home and restoring a Model-A Ford. No matter what Gary did, he always did it with generosity and great enthusiasm. His journey was one of awareness and understanding of the natural world that he explored and studied, and of the people who traveled with him on his path of discovery.



Welcoming New and Returning Board Members

As of October, we welcome two new directors to the Board, and thank outgoing directors **Kathryn Tackley** and **Gary Larson** for their service (please see obituary in this issue for Gary, who suddenly passed away on 3 October). Both Ron Larson and Steve Wille are dedicated lake people, with a wealth of knowledge gained in careers centered on aquatic ecosystem resources. Steve recently served as President of OLA and is rejoining the Board to put his prodigious skills in fund raising to work in benefit of OLA's scholarship and outreach program. Meet Ron and Steve in their own words:



Dr. Ron Larson has always loved being in and around water and therefore it's natural that he likes lakes. Having grown up along the Oregon coast, Ron wanted to be a marine biologist. After completing a PhD in marine sciences in Canada, Ron served a post-doctoral appointment in Florida, where he used submersibles to study deep-sea jellyfish. Later, Ron took a job with the US Fish and Wildlife Service in Georgia, then Mississippi, and finally in Klamath Falls, where he retired in 2014. His work with the USFWS focused on water development and endangered species, work that was both challenging and interesting, but his real love was to be outside on or in the water, and retirement provides that opportunity. Ron's current interests are the lakes in southcentral Oregon, especially Lake Abert and the smaller terminal lakes. The ecology of these small lakes is nearly unstudied, so they provide a good excuse for Ron to experience the beautiful Basin and Range landscape of southcentral Oregon. He hopes that his

efforts on the OLA board will bring more attention to lakes in that part of the state.



Steve Wille was born in Oregon, but considers himself a Pacific Northwest native having lived in Oregon, Montana, and Washington. He earned his graduate degree at Portland State University, then studied two years as a DAAD/Fulbright student at J.W.Goethe University in Frankfurt, Germany. After fifteen years in private consulting, he finally retired from the U.S. Fish and Wildlife Service. His professional interest usually involved the wearing of barn boots and wading in vernal pools, with a keen interest in fairy shrimp. He enjoys his time on the water too, whether it be fishing for salmon or volunteering with the Oregon Lake Watch program. When he gets blown off the water he reads history, and is currently compiling an uncle's WWII military records. As he tells it, "Thirty years before I was in Germany my uncle flew (backwards) in a B-17G over two of the cities where I lived. We have two very different perspectives of Europe."

Steve has been involved in a number of outdoor related NGO's, and is interested in enhancing student scholarship opportunities. In his new capacity as an OLA board member he wants to continue to find ways to build the OLA Student Scholarship Fund into a self-supporting endowment, and is interested in promoting safe, economically viable alternatives to lead in fishing tackle.

OLA BOARD OF DIRECTORS

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***Lake Wise***

Oregon Lakes Association

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**The Oregon Lakes Association Mission**

OLA, a non-profit organization founded in 1990, promotes understanding, protection and thoughtful management of lake and watershed ecosystems in Oregon. Serving entirely through volunteer efforts, the Oregon Lakes Association puts on an annual conference, publishes a tri-annual newsletter, sponsors Harmful Algal Bloom trainings, and works as an advocate for lakes in the legislative arena. For additional information on OLA, write to the address above, or [visit our website](#).

OLA and *Lake Wise* welcome submissions of materials that further our goals of education and thoughtful lake management in Oregon. OLA is grateful for corporate support that helps sustain the organization. Corporate members are offered the opportunity to describe their products and services to *Lake Wise* readers. These descriptions are not OLA endorsements and opinions appearing in *Lake Wise* are not OLA policy statements.

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