



CLARION

A Publication of the Colorado Lake and Reservoir Management Association
July 2004

www.CLRMA.org



Rocky Mountain Regional Lake and Reservoir Management Conference

"Lakes and Reservoirs - the Aquatic 'Gold' of the Western Landscape"

May 12-14, 2004

Sheraton Denver West Hotel, Denver, Colorado
Conference Highlights

Conference Highlights By Sharon Campbell

The recent Rocky Mountain Regional Conference was an overall success! We are still in the process of finalizing the hotel and other invoices, but we are in the black financially, which is very good news for both NALMS and CLRMA. Here are the attendance figures: 78 regular registrations, 7 student/daily registrations, and 8 vendor registrations. Our attendance list was actually about 119. Thanks to everyone who participated or attended the conference. Those who were unable to attend really missed an excellent program, a very nice venue with good food and lots of networking opportunities.

The program for the conference was excellent and we had 100% of our presenters giving their papers! That is particularly amazing since we had inclement weather on the first day of the conference. Many thanks must go to Chris Knud-Hansen for his diligence in identifying presenters and formatting all the abstracts for the registration packets as well

as his efforts to make sure the program functioned smoothly.

We also had one luncheon speaker, Ken Wright, from Ken Wright Water Engineers, who gave an excellent talk on "Water for the Anasazi" on Thursday.

CLRMA needs to acknowledge our sponsors for the event. Coors, U.S. Geological Survey, U.S. Bureau of Reclamation, Denver Water, Colorado Department of Public Health and Environment, the Colorado River Water Conservation District, Chadwick Ecological Consultants, Inc., HDR Engineering, and the City of Westminster. Altogether we received \$7,650 in sponsorship funding, but that was only part of the support that we received. The generosity of CLRMA members included Coors buying the beer for the opening reception, Reclamation printing and mailing the call for papers, City of Westminster doing the program layout, City of Thornton printing and mailing sponsorship letters and the Clarion newsletter, City of Boulder for the training units available for the conference and workshops, and so many others who spent time at the registration table, stuffed

registration packets, and answered questions for people during the conference. Great Events and Pamela Catlin, our on-site hotel liaison, provided constant oversight and facilitated the smooth functioning of the entire conference. We really appreciated their conference services as that relieved all the volunteers from many of the on-site logistical issues.

We also need to thank the Host Committee Chairs and volunteers that really made things happen before and during the conference.

Conference Chair - Sharon Campbell
Program Chair - Chris Knud-Hansen
Sponsorship Chair - Vic Lucero
Vendor Chair - Gary Girolimon
Posters/Students Chair - Steve Lundt
Local Arrangements - Stacey Smith
Student Volunteers - Jessica Lang
Training Units - Jim Shelley
Clarion Editor - Travis Bray

Shall we do it again? The host committees had a brief meeting shortly after the conference and the consensus at that time was yes, but not next year. However, in 2006, we may be doing another regional conference in Colorado hosted by CLRMA and we are hoping that many of you who missed this first conference will consider attending, participating and/or volunteering to make the conference successful. Check some of the pictures to see your fellow CLRMA members and others at the 1st RMRC and picture yourself at the next one in 2006!



Steve Heiskary, the 2004 NALMS President looking over the RMRC program

Editorial "About Editorials"
by Steve Lundt

I first would like to make an obvious clarification about the article titled, "Columbine Lake in Deep Water with Walmart" in the May CLARION. That article was an editorial written by me, Steve Lundt. The viewpoints stated were of my own and not of CLRMA or any other organization.

With that out of the way, CLRMA welcomes and encourages anyone to write an editorial for the CLARION. The CLARION is a newsletter. It is a way to pass around ideas, comments, experiences, and information about lakes and reservoirs in and around Colorado. CLRMA feels that it is appropriate for people to use the CLARION to share professional opinions about how we manage our lakes and reservoirs.

There are a couple of courtesy rules that we will strictly follow. Please no name calling, no threatening letters, and the CLARION Editor has final say on what gets printed.



Dr. Darrell Fontane, CSU, teaching the EXCEL-lent Workshop.

West Side Story by: Sarah Clements

Lake Appreciation Month is rapidly approaching with the focus turning towards public involvement in appreciation and celebration of our lakes and reservoirs. Getting people interested in protecting these precious resources can be a challenge at times, so the Three Lakes Watershed Association (TLWA) in the Grand Lake area is taking a hands-on approach. The Three Lakes Watershed, which encompasses Lake Granby, Shadow Mountain Lake, and Grand Lakes in Grand County, Colorado, is a grass roots citizens-based volunteer organization devoted to water quality and quality of life protection. Many TLWA members live on or near the lakes, and recreation is high during summer and winter months. Water quality issues such as decreasing clarity and increasing sediment, algae, and aquatic weeds have prompted growing concerns during the past several years. When faced with needing more data collection and information on all three lakes, but limited by constraints on funding for sampling, the option to use TLWA volunteer members became a solution. Combining a fun project into the larger Lake Awareness Month can help the group be part of the broader nation-wide picture.

In time for Lake Awareness Month, the TLWA will host a Secchi Disk Contest starting the last weekend of June and continuing through the summer until late September. A limited number of Secchi disks, as well as instructions for constructing a Secchi disk, will be available at the TLWA Annual Meeting on June 26th. Short training sessions will be provided to interested participants that help get folks involved with the hands-on project. Prizes will be awarded at the end of the contest for several categories including prizes for each lake, the most consistent observations, and oldest and youngest participants. While most volunteers will take measurements off private and public boat docks, many will take measurements from boats throughout the lakes. Photographs of the sampling location while sampling are being encouraged at least once a month, but are not required. Participants wanting to actively help will feel satisfied providing needed data for the lakes they care about while taking part in a fun activity. The small local newspaper will continue to help raise Lake Awareness by covering the Secchi disk contest over the four month contest. For more information of the TLWA Secchi Disk Contest, please call (970) 887-9429.

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SPOTLIGHT ON.....

Stacey Smith

Age: 31

Yrs w/ CLRMA/NALMS: 8/7

Yrs in CO: 8

What do you do: co-owner Quality-Water Biosystems (including field work, lab director, AP/AR, lots of different hats!)

Family: husband, Anthony

When I'm not working I am... skiing in the winter, relaxing in the summer

Your idea of happiness: sand between my toes, salt in the breeze

Not many people know that... I make jewelry

What do I like to do most: use my creativity

If I won the lottery: pay off my house, take a long vacation

Last book I read: Deception Point, Dan Brown

What political office: No thanks!

Toughest aspect of my job: never enough time to get it all done

What famous person would you like to meet most: Sting



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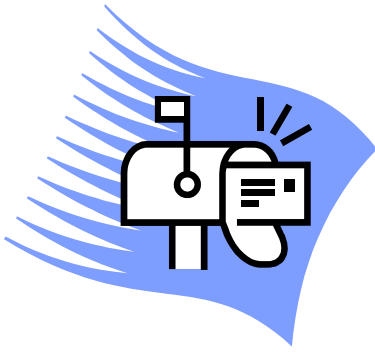
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(For more info:

travis.bray@denverwater.org)

Helpful Lake Websites

1. www.clrma.org
2. www.nalms.org
3. www.cdphe.state.co.us/wq/wqhom.asp = CDHE Water Quality Control Division
4. www.coloradowater.org = Colorado Watershed Assembly
5. www.coloradowatershed.org = Colorado Watershed Network
6. www.crh.noaa.gov/den/ = National Weather Service for Colorado
7. dipin.kent.edu/ = Great North American Secchi Dip-In
8. www.worldlakes.org = Links to lakes around the world
9. www.pca.state.mn.us/water/lake-faq.html = Good "Q & A" for lakes
10. www.lakeaccess.org/lakedata/lawnfertilizer/studydesign.htm = Lawn fertilizer study
11. www.voc.org = Volunteers for Outdoor Colorado



What's Happening in NALMS

Start making your plans for the 2004 NALMS Symposium: *Lakes: Habitat for Fish, Habitat for People*

November 3-5 in Victoria, B.C.

They are still accepting abstracts for papers. To get all the details, go to www.nalms.org.

In an effort to reduce mailing cost, CLRMA would like to establish an e-mail distribution list for the CLARION. If you would rather receive the CLARION as a PDF file, please let Travis Bray know. His e-mail address is travis.bray@denverwater.org



Thanks for your help!

Limno 101 by: Chris Knud-Hansen

Limnology is the field of study that attempts to decipher the biological, chemical, and physical interrelationships within freshwater systems. A new, perhaps even regular feature of CLRMA's Clarion is a short column highlighting basic limnological concepts, we've named "Limno 101". To coordinate with the annual *Great North American Secchi Dip-In* to be held during the first 2 weeks of July (sponsored by NALMS and the U.S. Environmental Protection Agency; see <http://dipin.kent.edu> for details), the inaugural topic for this feature is the Secchi disk.

The Secchi disk is perhaps the oldest and simplest tool in the limnological toolbox, and certainly the only one with an origin linked to the Pope. In the mid 19th century, Commander Cialdi (head of the Papal Navy) asked Father Pietro Angelo Secchi (scientific advisor to the Pope) to develop a new instrument for evaluating water transparency in the Mediterranean Sea. The result of Secchi's work was a submersible disk that now bears his name. On April 20, 1865, the Secchi disk was first lowered into the Mediterranean Sea from the papal steam yacht *L'Immacolata Concezione* (*The Immaculate Conception*).

Today, Secchi disks are lowered (or "dipped") into waters all over the world. The typical Secchi disk used in lakes is a weighted 20 cm disk with alternating black and white quadrants. The Secchi disk is lowered into the water until the observer can no longer see it, then slowly raised until it is visible again. The depth halfway between disappearance and reappearance is called the Secchi depth, and measures the transparency of the water. Transparency decreases as the amount suspended particulate matter (e.g., algae, fine clays, etc.) increases. Secchi depths can be less than 0.5 meters in green eutrophic waters receiving algal nutrients from such sources as sewage treatment plants, septic tanks, and lawn and agricultural fertilizers, or in brown waters receiving suspended sediments from such sources as runoff from construction sites, agricultural fields, urban storm drainage, or resuspended from bottom deposits. At the other end of the spectrum, very clear, pristine lakes can have Secchi depths down to 30-40 meters.

Because of the general inverse relationship between water clarity and water quality, the Secchi depth remains a very valuable limnological measurement nearly 140 years after its invention. It has proven particularly useful for evaluating trends over time for an individual lake or for comparing many lakes at the same time – both of which are long term goals for the annual *Great North American Secchi Dip-In*. For more information about the Secchi disk, please refer to Tyler, J. (1968), "The Secchi Disc", *Limnology & Oceanography*, 13:1-6.

President's Dock - Progress Report -

It has been an active six months for CLRMA and the summer season has only just begun. At last year's fall conference, I gave out my "Top Ten List" for things to work on in 2004. Below is a progress report on those ten action items.

1. **Re-Shape CLARION Newsletter** – with the great help of our new editor, Travis Bray, we have quickly accomplished this first task. We have added a few new items to the CLARION (e.g. West Side Story, NALMS Update, Editorials, and Meet a Board Director). We have also jumped into the 21st century and now offer the option to send our newsletter electronically. Send us an e-mail if you want it electronically.
2. **Increase Membership by 50%** - Membership was at a low last year of only 99. This year we have jumped back up to about 130 members, only 20 short of the 150 goal. Please spread the word around about joining CLRMA.
3. **Boost West Slope Participation** – We are making great contacts with some of the west-slope watershed groups (e.g. North Fork River Improvement Association), and we are going to continue to get great help from our west-slope board director, Sarah Clements.
4. **20 Student Members** – Flyers have been sent to all colleges and universities in Colorado explaining the wonderful opportunities that CLRMA can offer to students. We also increased our 1 student membership from last year to 5. With more work in the fall, we hope to bring on more students.
5. **Develop a Volunteer Lake Monitoring Program** – I am close to finishing the draft plan for the program. CLRMA is looking at either working with the River Watch program that is supported by Colorado Department of Wildlife or using Bob Carlson (Kent State U.) to manage the volunteer data. The goal is to recruit volunteers this year and begin monitoring next year. Contact CLRMA if you are interested in becoming a volunteer.
6. **State Classification of Lakes and Reservoirs Separately** – Not much has happened with this one. Although, it has been discussed at state meetings to separate lakes/reservoirs from the stream classification system.
7. **Promote "Lake Appreciation Month"** – Over a 100 posters have been sent out to lake areas advertising for this event. The Governor of Colorado, for the third consecutive year,



- has signed a proclamation declaring it an official Colorado event. CLRMA is working on incorporating the awareness month into next year's Colorado Cares 2005 events. Over 50 press releases have been sent out again to let the media now about this event. Several CLRMA people who monitor lakes and reservoirs will be participating in the 10th Annual Great American Secchi Dip-In in July.
8. **Best-Ever Rocky Mtn. Regional Conference** – Any questions!!!
 9. **Bridge the gap between CLRMA and watershed groups** – Every watershed group now receives the CLARION and we have sent contact letters to all of them explaining what CLRMA is about. We also have had three watershed groups join CLRMA this year!
 10. **State Phosphorus ban on domestic detergents and dish soaps** – I have met with a lobbying group who has agreed to hire an intern this summer to do the appropriate homework to find out what it would take to get the State next year to ban unnecessary phosphorus in our laundry and dish soap products.
- I am looking forward to the next six months and hope to continue to make progress on these ten action items. Please feel free to contact CLRMA or me if you are interested in any of these items or if you have any thoughts or ideas about what else CLRMA should be doing.



LAKE APPRECIATION MONTH JULY

People have used and enjoyed Colorado lakes and reservoirs for many years. It is time to give back. The month of July, nationwide, is Lake Appreciation Month. Go and take a closer look at your favorite lake or reservoir and give thanks.

Here are some easy ways to give back:

- ✍organize a shore clean up
- ✍go boating
- ✍ride your bike to work
- ✍conserve water at home
- ✍clean off your boat and trailer every time after leaving a lake
- ✍educate your neighbor about not hosing dirt down the storm drain
- ✍join CLRMA and/or NALMS
- ✍participate in the Secchi Dip-In
- ✍support your favorite state park
- ✍become a volunteer lake monitor
- ✍pick up your pet's waste. Please check our web site to find the latest events for Lake Appreciation Month (www.clrma.org/lam.htm).



Use All of Your Lake Tools: By Steve Lundt

Many of CLRMA's members are City employees who work on storm water issues and drinking water reservoirs. If you are finding that you are struggling with a lake or reservoir problem, remember that you're most versatile lake and reservoir tools in your toolbox are the CLRMA and NALMS organizations.

This is why City's have an "Organization" membership to CLRMA. It is a way to network and find solutions for your situation. Even though every lake is different, there are a handful of universal problems and symptoms that lakes and reservoirs have (e.g. recreational use conflicts, urban and development impacts, taste and odor issues, cultural eutrophication, and siltation).

If you have a problem with a lake, it is guaranteed that someone else out there has been through the same problem. Between CLRMA and NALMS, you have access to the nation's top limnologists, consultants, and professors. So use CLRMA and NALMS and get your moneys worth. We can help you with your lake problems.



Calendar of Events:

AWRA 40th annual conference

November 1-4, 2004

Presented by AWRA in Orlando, FL

More information at 540-687-8390

Day on the Lake

July 24, 2004

Left Hand Reservoir

More Information at 303-443-7839

(Kelly Close)

2004 CLRMA Board of Directors

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Exercise while you treat for EWM

NEW



[Hi-heels not included, some assembly required]

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(For more info: travis.bray@denverwater.org)

Colorado State Parks – A great way to protect our best lakes and reservoirs

What better way to protect and preserve our lakes and reservoirs than to buffer them with a state park. Out of the 40 state parks and recreation areas, 30 of them focus on a lake or reservoir (see highlighted list below). The remaining ten also do their part helping to protect the water quality of downstream lakes and reservoirs. So take this list, your family, and a canoe and see how many state parks you can get to this summer (please see map on the next page).

- Barr Lake State Park** – Barr Lake (1,900 acres)
- Bonny Lake State Park** – Bonny Lake (1,900 acres)
- Boyd Lake State Park** – Boyd Lake (1,700 acres)
- Castlewood Canyon State Park** – use to have the Castlewood Canyon Reservoir
- Chatfield State Park** – Chatfield Reservoir (1,500 acres)
- Cherry Creek State Park** – Cherry Creek Reservoir (880 acres)
- Crawford State Park** – Crawford Reservoir (397 acres)
- Eleven Mile State Park** – Elevenmile Canyon Reservoir (3,400 acres)
- Harvey Gap State Park** – Harvey Gap Reservoir (160 acres)
- Highline Lake State Park** – Highline Lake (174 acres) & Mack Mesa Lake
- Jackson Lake State Park** – Jackson Reservoir (2,700 acres)
- John Martin Reservoir State Park** – John Martin Reservoir (22,325 acres)
- Lake Pueblo State Park** – Pueblo Reservoir (4,646 acres)
- Lathrop State Park** – Horseshoe Lake (140 acres) & Martin Lake (180 acres)
- Mancos State Recreation Area** – Jackson Gulch Reservoir (216 acres)
- Navajo State Recreation Area** – Navajo Lake (15,000 acres)
- North Sterling State Park** – North Sterling Reservoir (3,000 acres)
- Paonia State Park** – Paonia Reservoir (334 acres)
- Pearl Lake State Park** – Pearl Lake (167 acres)
- Ridgeway State Recreation Area** – Ridgeway Reservoir (1,000 acres)
- Rifle Gap State Park** – Rifle Gap Reservoir (350 acres)
- San Luis Lakes State Park** – San Luis Lake (1,000 acres)
- Spinney Mountain State Park** – Spinney Mountain Reservoir (2,500 acres)
- Stagecoach State Park** – Stagecoach Reservoir (780 acres)
- Steamboat Lake State Park** – Steamboat Lake (1,053 acres)
- St. Vrain State Park** – Barbour Ponds (80 acres)
- Sweiter Lake State Park** – Sweiter Lake (200 acres)
- Sylvan Lake State Park** – Sylvan Lake (40 acres)
- Trinidad Lake State Park** – Trinidad Lake (800 acres)
- Vega State Park** – Vega Reservoir (900 acres)

Special Lakeline Offer

The North American Lake Management Society (NALMS) is offering their premiere magazine, “*LakeLine*” at an introductory subscription rate of \$25/year.

Published quarterly by NALMS, this magazine contains timely articles and other information about important lake management issues. “*LakeLine*” is a medium for education and communication among lake management experts and practitioners, as well as lake enthusiasts. Each issue contains news, views, and interesting information on lakes and reservoirs and their watersheds, from your neighborhood to around the world.

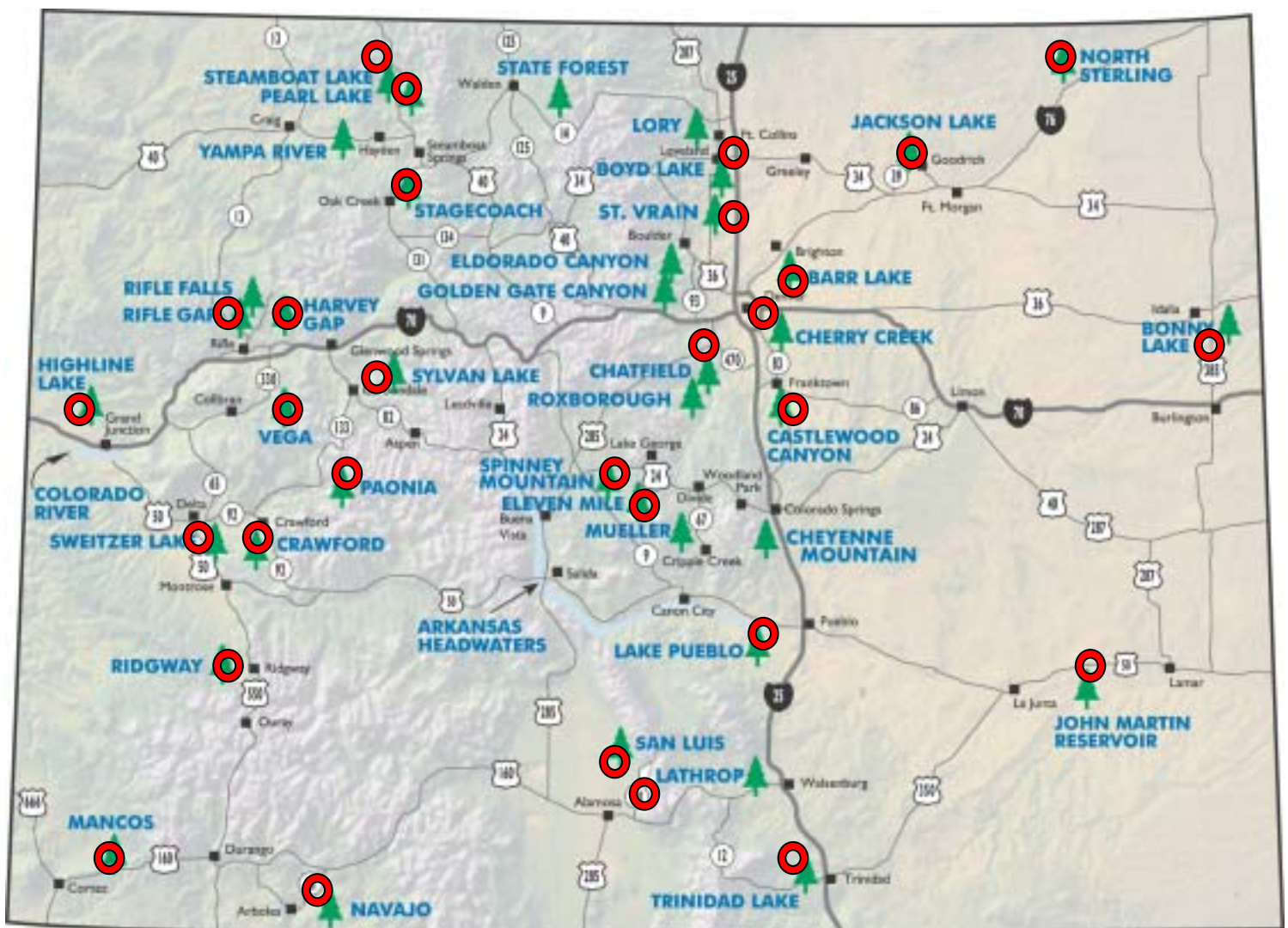
For more information and to subscribe, go to <http://www.nalms.org/lakeline/lakeline.htm>.

FYI - Swimmer's Itch: by Steve Lundt

In some regions, *schistosome cercarial dermatitis* or swimmer's itch is a problem condition. Swimmer's itch is caused by a parasitic flatworm that lives in the bloodstream of a host aquatic bird species. The eggs of the flatworm are passed into the lake in the excrement of the bird.

Once in the water, the eggs will hatch and the larvae searches for and penetrates into a certain species of snail. The larva grows in the snail and eventually emerges as a second larval stage known as a cercaria.

The cercaria normally penetrates the skin of the host species of bird and the life cycle begins again. The cercaria can also, by mistake, penetrate the skin of swimmers. Since humans are not the host needed for growth, the larva soon dies. Although harmless, the cercaria can leave the swimmer with an itchy welt for a few days.



Continued from: "Colorado State Parks – A great way to protect our best lakes and reservoirs".