



WATERLINE

SEPTEMBER 2010

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Meet the raccoons: Your lakefront neighbors

Humans love living near lakes and so do a wide variety of other creatures. Raccoons are among the most common and evoke a range of emotional responses from their human neighbors, from admiration for their adaptability to frustration with their garden plundering and concern for the safety of pets and children who might encounter them. Raccoons have adapted to thrive near humans and are now more common in and around urban areas than they are in the wilderness.

Life cycle, food, and habitat

Raccoons usually live only two to three years in the wild, although captive raccoons have lived as long as 15 years. Their main predators include hunters, cougars, coyotes and dogs. They are often killed by cars, given their urban ways, but can also die from disease and occasionally starvation, especially when young.

Adult raccoons usually live alone, except during mating season. The young stay with their mothers until they are nearly a year old, although they can



Raccoons are usually nocturnal and can often be found resting in trees and other spots during the day.

feed on their own within weeks of birth. When food is abundant, raccoons will sometimes feed as a group. Occasionally young males band together to protect themselves against dominant males, and females have also been known to make temporary groups. Several animals may den together to wait out winter storms and cold temperatures.

Raccoons are typically active from dusk until dawn, resting in trees or den sites during the day. They will den in wood or brush piles, hollow logs, culverts, under decks, porches, or outbuildings, in attics or chimneys, or in the abandoned nests or dens of other animals. Raccoons will normally use a site for several days and then move to another den nearby -- even mothers with young that must be moved one by one to the new site. Their favorite habitats are wooded and close to water, like creek banks or lake shorelines, but they are resourceful and use many unusual places if they need to.

Preferred foods include freshwater animals like crayfish, snails, frogs, and small fish, but raccoons will happily eat small reptiles, birds, and mammals, eggs, slugs, insects, nuts, berries and seeds. They like to pick at road kill -- often becoming road kill themselves in the process. Garden produce, especially

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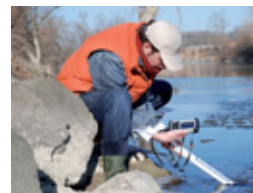
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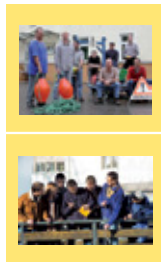
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Ecology rewriting the aquatic plant management permit: Your comments welcome

by Jon Jennings and Kathy Hamel, Dept of Ecology

If you live on a lake, or use lakes for recreation, you have undoubtedly encountered some of the many aquatic plants that inhabit Washington's waters -- milfoil, pond lilies, pond weeds and many others. Aquatic plants provide habitat for aquatic organisms like fish, invertebrates, birds, and amphibians. But sometimes these plants spread too fast, choking out other plant life, reducing wildlife habitat and limiting recreation. Some plants not native to Washington are so invasive that they must be eradicated per state law. Whatever the reason for controlling or eradicating aquatic plants, herbicides are the most common method chosen. In Washington, discharging herbicides into a lake requires a water quality permit.

The Washington State Department of Ecology (Ecology) is currently updating the Aquatic Plant and Algae Management General Permit that authorizes the discharge of herbicides to lakes (and a few other areas) to control or eradicate nuisance plants, noxious weeds, and algae. Ecology released the draft permit for public comment on September 1 and hopes to issue the final permit in late spring 2011.

In putting together the draft, Ecology weighed the ideas and information available; there are strong opinions on both sides of the debate. Some are in favor of stricter controls like more public notice; others see the current permit as too restrictive. Any permit issued by Ecology must be legally and technically

sound and meet the requirements of both state and federal law.

The draft permit also reflects national regulatory changes. The federal Environmental Protection Agency (EPA) is currently developing an Aquatic Pesticides General Permit to be issued in April 2011. In addition to aquatic weed and algae control, that permit will cover discharges of aquatic pesticides intended to control mosquitoes and other flying insect pests, aquatic nuisance animal control, and forest canopy pest control. Ecology must ensure that its permits are as stringent as the EPA permit, which means requiring a pest management plan, for example.

Other changes in the draft include improving the permit's clarity and usability, notification requirements before treatment, inactivation of phosphorus in lake systems, integrated pest management, defining treatment areas, determining who a treatment sponsor will be, and allowing the use of additional active ingredients.

Please let us know your thoughts! Ecology welcomes your input through the public comment period, which concludes on October 16. Take a [look at the draft permit here](#).

Comments and supporting documents may be submitted to aquaticpermitcomments@ecy.wa.gov. For more information, contact Kathy Hamel at kham461@ecy.wa.gov or Jon Jennings at joje461@ecy.wa.gov.

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Meet the raccoons

Continued from front page

sweet corn, and tree fruit like apples and plums are favorite foods. They are drawn to domestic animal enclosures and love garbage and pet food. Raccoons enjoy mixing their food with water, so will gravitate to areas where it is readily available, but often forage in places without a water source as well.

Diseases and health risks

Raccoons are carriers of parasitic round worms that can be transmitted to people who touch live animals or carcasses. If you must touch a raccoon, wear disposable gloves and wash thoroughly with warm soapy water afterward.

Raccoons are vulnerable to rabies and can be carriers as well. While rabies is rarely transmitted to humans in Washington, make sure to contact your local health agency or animal control if you see animals behaving in a nervous or aggressive manner, active at the wrong time of day, or drooling or foaming at the mouth. Any pets that spend time outdoors and could encounter a raccoon should be vaccinated against rabies.

Living with raccoons

Raccoons love our garbage, as well as the wonderful den sites we humans provide in developed areas. The abundant water and forest edges near many lakes provide ideal habitat, so raccoons will continue to live there. Hunting and trapping would have to be at a massive scale to put a dent

in their populations and thus are unlikely to be practical management tools. However, human residents can minimize raccoon problems for themselves and their neighbors with some simple steps.

• No feeding, EVER

Raccoons are wild animals and can provide for themselves. Feeding will increase the number of animals around your property, which can lead to disease. They may lose their fear of humans and even become aggressive if the expected food is not offered. Fearless raccoons also create problems for your neighbors, as they come to expect handouts from everyone.

• Keep the lid on tight! No access to garbage or compost piles

One of the reasons raccoons hang around urban areas is the amazing amount of food they find in our garbage cans and compost piles. Lids must be tightly secured with rope, secure snap-tops, bungee cord, or weights. Some experts recommend chaining garbage cans to a sturdy stake to prevent overturning. If you compost vegetable waste, use a worm bin or receptacle with a tight lid.

• Feed pets indoors and keep them in at night

Pet food left out overnight will be an immediate target, and is especially appealing with the water dish next to it. Always feed your pets indoors, and bring them in at night to avoid

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nasty encounters for everyone. Raccoons are often injured or killed by dogs, and cats can be harmed by raccoons. If you keep chickens or rabbits, secure them in a sturdy cage or building at night and keep their food tightly secured.

- **Eliminate access to possible den sites**

Favored den sites include attics, chimneys, crawl spaces under houses, porches, and decks, garages or garden sheds, summer houses or gazebos by the lakeshore. Secure spaces against entry by nailing ¼ inch mesh hardware cloth, boards, or metal slashing across the entrances – but make sure you do not trap animals inside while doing so.

The good news is that most raccoons will leave on their own after several days to a week, as their habits include moving den sites frequently. The exception is mothers with young, who may stay up to eight weeks in a particular location. Do not try to evict the family with chemicals or smoke, as young animals may find it hard to escape a dumpster or chimney, leaving you with a dead youngster and a distraught mother. Get help from a knowledgeable animal removal expert instead.

- **Finally, have fun watching them – from a distance**

Raccoons are highly intelligent, quirky creatures with very agile hands. Watching raccoons forage for food, noticing their explorations and their curiosity about what they encounter can be highly entertaining. Finding their tracks along the beach and playing detective about where they

went and what they did can be absorbing fun for children. Keeping them as wild as possible will also keep you, your family, pets and property safe for many years. Enjoy!

Note: This is the first in a series of articles about the wild and not-so-wild animals that live near lakes in Washington. We'll explain their life cycles, needs, and habits, explore animal and human impacts on each other; and discuss strategies for maintaining your property and safety while enjoying the animals that are a natural and delightful part of living near lakes. Subsequent articles will focus on deer, beavers, coyotes, and bears. If you have another animal you would like featured, please let us know!



Raccoons, in family groups or solo, are a common sight near lakeshores, especially in developed areas.

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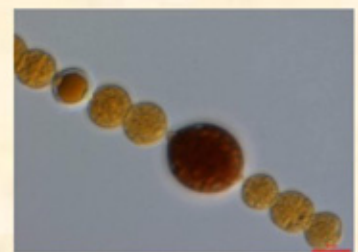
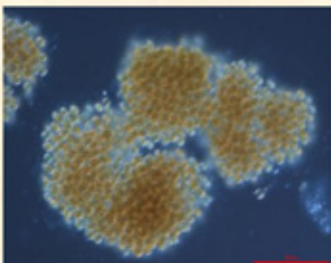
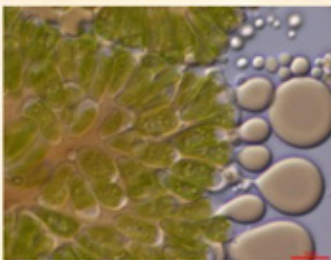
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Plan now to attend NALMS meeting in Spokane next year!

WALPA is affiliated with the North American Lake Management Society (NALMS), whose mission is to forge partnerships among citizens, scientists, and professionals to foster the management and protection of lakes and reservoirs for today and tomorrow.

NALMS' signature event each year is its International Symposium, held each fall and typically drawing 500-600 attendees. This symposium, whose location rotates among regions of North America, will be held in Spokane in fall 2011, devoted to the theme of Diverse and Sustainable Lake Management.



The Symposium produces material for NALMS' publications, promotes the exchange of scientific information among scientists, lake managers, students, and citizens, and provides a rare opportunity for face to face contact and networking. This will be a great opportunity for local lake managers and enthusiasts to see what is happening both nationally and internationally in lake management strategies and techniques, and to engage national experts on topics of local interest.

The symposium is scheduled for October 23 – 28th in 2011 and will be held at the [Spokane Convention Center](#).

While you're contemplating next fall's conference, why not join NALMS? Joining is simple and supports efforts to promote lake health across the continent. First, decide what level of membership works for you by looking at the information presented on the [NALMS membership page here](#). Second, complete your membership form – and you're in!

- Join or renew with the [on-line membership page](#).
- To join or renew by mail, [download the application by clicking here](#).

If you have any questions, please contact Region 10 NALMS representative Bijay Adams at (509) 922-5443, (509) 370-1574 or bijay@libertylake.org. Thank you for supporting NALMS!

Olympia update: Gearing up to address phosphorus concerns again

Summer is the quiet season in Olympia but fall is around the corner, bringing with it elections and the reawakening of the legislative session. WALPA and other lake advocates are gearing up to bring back phosphorus restriction legislation this session.

We saw promising progress last session on the bill, which would limit how much phosphorus can be applied to residential lawns in Washington. Phosphorus from lawn care and other sources can spur the frequency and intensity of algae blooms in lakes and stimulate the growth of aquatic weeds. Passing this legislation would be a huge step toward protecting and improving lakes across the state.

Last session we had excellent partners and sponsors; the bill passed the Senate only to get bogged down amid late session budget work in the House. So we're joining forces with our partners again this year to craft a strong bill to garner the same traction and support – and more -- in the coming legislative session. The WALPA board is asking all members to contact their elected officials and start talking about the phosphorus bill.

You can find all the bill information at the [WALPA website here](#).



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"Maple Leaf and Duckweed" captures WALPA photo contest honors

Once again a highlight of the WALPA conference was the contemplation of a number of lovely lake photos members submitted to the annual photo contest. This year's prize for the most beautiful, thought-provoking, and timely lake photograph was awarded to Gene Williams for his artistic composition *Maple Leaf and Duckweed*. The photo was taken along an arm of Lake Washington on the east side of Foster Island near the 520 bridge in Seattle. Gene, a long-time WALPA member and lake advocate from Snohomish County, will receive a \$50 Amazon gift certificate for his entry.



Camera Info:

Canon Powershot G9.

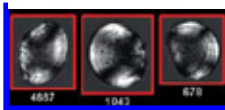
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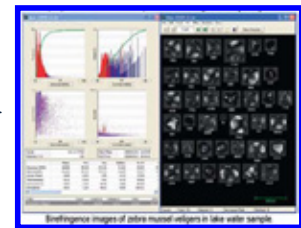


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analysis process (See Veliger Detection Services - Program Information Packet, at www.cleanlake.com, Mussel Veliger Detection Tab for further information). The specific advantages that the FlowCAM[®] provides over traditional microscopy techniques include a larger sample size, faster sample test time, reduced human error, and physical snapshots of veligers. This results in a process that is more accurate and more thorough with a quick turnaround time.



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Algae testing program continues to provide valuable info

By Melanie Tyler, DOE

The Washington Department of Ecology (Ecology) Algae Identification and Toxicity testing program began in 2008 and continues to provide valuable information year round to lake users, scientists, and public health agencies. While most blue-green algae blooms dissipate by late fall, some linger through the winter, so local health departments and others submit lake samples through winter 2010 and into spring.

From January to June of this year, the King County Environmental Laboratory (KCEL) completed more than 200 analyses on more than 90 individual samples, almost 50% more than in 2009. (KCEL is Ecology's contractor for algae identification and toxicity testing.) The samples, however, were from 24 lakes so far this year as compared to the 39 lakes sampled in the first half of 2009. Waughop Lake (Pierce County) continues to stand out for its microcystin toxicity. Aside from Waughop, only a single sample at Lone Lake has tested above recreational levels for microcystin. Anderson Lake (Jefferson County) leads the way in anatoxin-a levels. Lone and Clear (Pierce County)

Lakes join Anderson as the only lakes with anatoxin-a levels above recreational guidelines. Remember, this information is only for sampling through June 2010, and the situation is likely to change as summer data are analyzed.



Algae bloom on Steel Lake in Federal Way

Ecology added testing for cylindrospermopsin and saxitoxin this year. As of the end of June, these tests have been run on samples from only a few lakes. Waughop is the only lake to have a measurable level of either of these newly measured toxins -- with saxitoxin concentrations between 0.079 and 0.567 micrograms/liter. The highest levels were recorded in early March, tailing off by May. Ecology will be working with the Department of Health to develop recreational guidance for these two toxins, just as they did for anatoxin-a and microcystin in the last several years. That guidance should be available by summer of 2011.

For more information about the algae identification and toxicity testing program, please contact Tricia Shoblom at (425) 649-7288 or tsho461@ecy.wa.gov. Or visit Ecology's website.

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