

# Stream Team News

**FREE**

**OLYMPIA • LACEY • TUMWATER • THURSTON COUNTY**

**EDUCATE • PROTECT • RESTORE**



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Dec 2019-Jan-Feb 2020

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## Stream Team celebrates 30 years and Earth Day celebrates 50 years!

Join us for a *30/50 Earth Year!* celebration recognizing Stream Team's 30 years and Earth Day's 50 years of raising environmental awareness and stewardship! Do you want to be part of a larger community effort? Check out Stream Team's volunteer programs, educational opportunities, workshops and conservation events, benefiting Thurston County and the planet.

Fifty years ago on April 22, 1970, millions of people took to the streets to protest the negative impacts of 150 years of industrial development. All over the world, it was apparent that pollution was having serious effects on the environment, wildlife and people. From that fateful day, the Environmental Protection Agency and numerous laws including the Clean Water Act and the Endangered Species Act sprang forth.

Each year more than one billion people worldwide celebrate Earth Day, taking part in the largest civic focused day of action in the world. As global environmental and climatic issues grow, it is critical to increase awareness and join a unified global response.

Similarly, 30 years ago Stream Team began as a way for the community to take action to cleanup and protect local watersheds. Over the years, thousands of passionate Stream Team volunteers have made a difference here in south Puget Sound.

As we approach the New Year, make a resolution to join Stream Team to celebrate our *30/50 Earth Year!* See our events and registration pages for educational opportunities; sign up for our Climate Conversations lectures or related workshops, participate in a hands-on science event or help restore natural spaces through the removal of invasive plants and planting native trees and plants.

In 2020, participate in a Stream Team event 12 or more times and win a limited edition *30/50 Earth Year!* commemorative anniversary prize! That is just one event per month! Look for the *30/50* emblem on qualifying events.

**ON THE COVER:** Stream Team volunteers. Photo by Michele Burton Photographer.

### STREAM TEAM MISSION

To protect and enhance the water resources and associated habitats and wildlife in Thurston County through citizen action and education. *Stream Team is funded and jointly managed by the stormwater utilities of the Cities of Lacey, Olympia and Tumwater and Thurston County. Stream Team programs meet the requirements for the National Pollutant Discharge Elimination System (NPDES) permit for stormwater.*

### SPECIAL NEEDS?

Citizens requiring special accommodations can call one of the coordinators listed at least one week prior to an event to make special arrangements.

### FOLLOW US:

 [ThurstonStreamTeam](https://www.facebook.com/ThurstonStreamTeam)  
 [thurston\\_stream\\_team](https://www.instagram.com/thurston_stream_team)

### NEWSLETTER CONTRIBUTORS:

Stephanie Bishop, Meridith Greer, Susan McCleary, Ann Marie Pearce, Michelle Stevie, Emily Watts, Sarah Tolle, and Michele Burton Photographer.

### DESIGN & LAYOUT:

ASGD Brand Strategy + Design  
[www.AzureSGD.com](http://www.AzureSGD.com)



### STREAM TEAM INQUIRIES 360-438-2672 or [streamteam@ci.lacey.wa.us](mailto:streamteam@ci.lacey.wa.us)

#### IN LACEY:

City of Lacey Water Resources Program  
 420 College St. SE, Lacey, WA 98503

#### Attn: Lacey Water Resources

Tel: 360-438-2687  
 TDD: 1-800-833-6388  
[WaterResources@ci.lacey.wa.us](mailto:WaterResources@ci.lacey.wa.us)

#### IN OLYMPIA:

City of Olympia Water Resources Program  
 P.O. Box 1967, Olympia, WA 98507-1967

#### Attn: Michelle Stevie

[mstevie@ci.olympia.wa.us](mailto:mstevie@ci.olympia.wa.us)

#### IN TUMWATER:

City of Tumwater Water Resources Program  
 555 Israel Road SW, Tumwater, WA 98501

#### Attn: Meridith Greer

Tel: 360-754-4148  
 TDD: 1-800-833-6388  
[mgreer@ci.tumwater.wa.us](mailto:mgreer@ci.tumwater.wa.us)

#### IN THURSTON COUNTY:

Thurston County Water Planning  
 2000 Lakeridge Dr. SW, Bldg. 4, Rm 100,  
 Olympia, WA 98502

#### Attn: Ann Marie Pearce

Tel: 360-754-3355 ext. 6857  
 TDD: 360-754-2933  
[ann.marie.pearce@co.thurston.wa.us](mailto:ann.marie.pearce@co.thurston.wa.us)



# 30/50 EARTH year! PASSPORT

**Use this passport to get started volunteering!** Participate in a Stream Team event 12 or more times in 2020 and win a limited edition 30/50 Earth Year! commemorative anniversary prize. At each 2020 event you volunteer at, have the Stream Team Coordinator stamp or initial a square below. For more events, visit [streamteam.info](http://streamteam.info) and click on "Register."

JAN 4 Bees & Other Pollinators 	JAN 25 Amphibians of the Pacific Northwest 	FEB 12 Climate Conversations: Climate Science 101 	MAR 27 Climate Conversations: The Food Challenge 
APR 8 McLane Creek Trail Maintenance 	APR 11 Lacey Arbor Day Seedling Giveaway 	APR 17 Climate Conversations: Forest Carbon Sequestration 	APR 22 Earth Day 2020 
MAY 14 McLane Creek Trail Maintenance 	MAY 16-17 Lacey Spring Fun Fair 	MAY 29 Bat Talk & Walk, Lacey Community Center 	JUNE * Monitor Local Streams 
JUNE * Bat Talk & Walk Traditions, Capital Lake 	JUNE 5 World Oceans: David Jennings Underwater Photography 	JUNE 6 World Oceans Day, Tumwater Falls Park 	JUNE 18 McLane Creek Trail Maintenance 
JULY * Priest Point Park Beach Seine 	JULY 2, 9, 16 What's Living in Budd: Plankton Monitoring 	JULY 9 McLane Creek Trail Maintenance 	JULY 23 What's Living in Long Lake: Plankton Monitoring 
JULY 30 McLane Creek Trail Maintenance 	JULY & AUG Marine Creature Mondays 	July 29 – Aug 2 Thurston County Fair Stream Team Booth 	SEPT 26 Nisqually Watershed Festival 
OCT 3 Return of the Chinook, Tumwater Falls Park 	OCT 3 Lacey Children's Day 	NOV 8 Chum Salmon & Cider Celebration, McLane Crk Trail 	DEC * Native Plant Restoration 

*\*Dates are to be determined. Please visit [streamteam.info](http://streamteam.info) for more information.*



## MLK Day of Service

Taking inspiration from Dr. Martin Luther King Jr., thousands of people each year celebrate MLK Day by volunteering to give back to their communities. Join other enthusiastic community members for a day of comradery and celebration by volunteering with us for invasive plant removal and native planting to help restore our parks and natural areas. Please dress for the weather and wear sturdy shoes. Tools and snacks provided.

## OLYMPIA •••••

- Sat, Jan. 18
- 10 a.m. – 1 p.m.
- LBA Woods,  
3333 Morse-Merryman Rd SE,  
Olympia

To volunteer, register at <http://volunteer.olympiawa.gov/> or contact Jennifer at [jgessley@ci.olympia.wa.us](mailto:jgessley@ci.olympia.wa.us).

## LACEY •••••

- Mon., Jan. 20
- 10 a.m. – 1 p.m.
- Woodland Creek Community  
Park, 6729 Pacific Ave SE, Lacey

To register visit [www.streamteam.info](http://www.streamteam.info) and click on “Register” or contact Emily at [ewatts@ci.lacey.wa.us](mailto:ewatts@ci.lacey.wa.us).



**Make a 2020 Stream Team New Year Resolution!**  
**Follow these 10 tips to help protect local water quality and Puget Sound for years to come!**

- **Pick up pet waste!** Even a pea-sized amount of dog poop contains 23 million fecal coliform bacteria. Protect your family and your water by scooping it, bagging it, and trashing it every time.
- **Check for vehicle leaks!** Over 7 million quarts of oil wash into Puget Sound every year from leaking vehicles. Ask your mechanic to check for leaks next time you get your oil changed. **For more information, visit [fixcarleaks.org](http://fixcarleaks.org).**
- **Practice natural yard care!** Pesticides, herbicides, and fertilizers can easily wash into our waterways. Building healthy soils and practicing smart watering can create a healthy yard without harsh chemicals.
- **Plant native plants!** Using plants that have adapted to local soils and climate can help reduce pesticide use, save water, decrease maintenance time and provide wildlife habitat.
- **Wash your car safely!** Washing your car on the driveway lets dirty wash water flow into storm drains. Try washing your car on the lawn or at a commercial car wash instead to make sure you’re keeping your car and the streams clean.
- **Report spills!** Anything that spills on the ground or goes down a storm drain can pollute our water. Report spills to your local jurisdiction so they can get cleaned up before they become bigger problems.
- **Educate your friends and neighbors!** Protecting water quality is important for all of us. Talk to your friends, family, and neighbors about simple ways we can all protect this important resource.
- **Dispose of your chemicals properly!** Spilled chemicals can pose serious health risks to the community. Be sure to always read the directions and dispose of chemicals properly. Most chemicals can be disposed of at Thurston County’s HazoHouse. For more information, visit [thurstonsolidwaste.org](http://thurstonsolidwaste.org) and click on “Hazardous Waste Disposal.”
- **Only rain down the storm drain!** Most storm drains lead directly to streams and creeks untreated. Help protect aquatic and human health by only allowing rain to flow into storm drains.
- **Pick up litter!** Litter, especially cigarette butts, is one of the biggest sources of water pollution. Put trash into trashcans and pick up litter to keep Puget Sound healthy and beautiful.

*Resolve to protect water quality every day to keep our water clean and healthy.*

**Want more tips?** Visit [streamteam.info](http://streamteam.info) for more Actions for Clean Water.

**If you see someone dumping anything into a storm drain or find a small-scale spill, call the 24-hour hotline.**

**Olympia**  
360-753-8333

**Lacey**  
360-491-5644

**Tumwater**  
360-754-4150

**Thurston County**  
360-867-2099

**For life-threatening spill emergencies, call 911.**



## Amphibians of the Pacific Northwest Workshop

Did you know that amphibians are one of the aquatic species most impacted from stormwater pollution? Explore the ecology, habitat requirements, and impacts affecting our local frog and salamander species. Then learn how to identify different life stages of PNW amphibians with an emphasis on egg mass identification.

Join us with guest herpetologist Dr. Marc P. Hayes for a fun, informative workshop. Dr. Hayes, a herpetological ecologist and senior research scientist with the Washington Department of Fish and Wildlife, has over 40 years of experience working with amphibians and reptiles in Arizona, California, Costa Rica, Florida, Mexico, Oregon and Washington.

**Beat the winter blues!** This winter, join other adventurous volunteers and survey wetlands for amphibian egg masses! Surveys are held mid-February through March. Watch our website calendar for additional dates in March for more egg mass surveys. Volunteers are encouraged to attend the Egg Mass Identification Field Training before participating in surveys, onsite field training will also be provided.



## AMPHIBIANS OF THE PACIFIC NORTHWEST WORKSHOP

- Sat., Jan. 25
- 9:30 – 11 a.m.
- LOTT WET Science Center, 500 Adams St NE, Olympia

### EGG MASS IDENTIFICATION FIELD TRAINING:

- Sat., Jan. 25
- 11:30 a.m. – 2 p.m.
- Hansen Elementary, 1919 Road Sixty-Five, Olympia

## EGG MASS SURVEY DATES

- Sat., Feb. 1, 8, 29 & Mar. 7, 21, 28
- Thurs., Feb. 13 & Mar. 12
- Locations TBA

Watch our website calendar for additional dates in February and March for more egg mass surveys.

**Please register separately for workshop, field training and surveys.** To register for this workshop, or to help survey egg masses, visit [www.streamteam.info](http://www.streamteam.info) and click on “Register”. For more info, contact Michelle at [mstevie@ci.olympia.wa.us](mailto:mstevie@ci.olympia.wa.us)



## ROAD MONITORING

- Sat., Dec. 7, 21, Jan. 4, 18, Feb. 8, 22
- 8 a.m.
- Meeting place TBD
- Surveys canceled if temps are 40°F or below



## Traffic & Animal Migrations: A Perilous Combination

Stormwater pollution is not the only challenge amphibians face in our urban environment. During the winter rains, amphibians migrate from their terrestrial habitat to open ponds and wetlands for the spring breeding season. Many of these migration routes are intersected by busy roadways and areas of heavy traffic leading to decimated amphibian populations as they venture to cross roadways.

Following strict safety precautions, volunteers conduct surveys to count migrating amphibians and removing them from the road. Road surveys help managers to know about local amphibian populations and record road mortality in areas suspected of high use.

Training provided as part of the survey. To register visit [www.streamteam.info](http://www.streamteam.info) and click on “Register”. For more information, contact Michelle at [mstevie@ci.olympia.wa.us](mailto:mstevie@ci.olympia.wa.us)

## Global Rivers Environmental Education Network (GREEN)

While winter rains flow into storm drains and carry runoff to rivers across Thurston County, local youth are taking action. Equipped with water quality testing supplies, data sheets and the power of observation, more than 1,500 students and their teachers will collect water from their local stream, hoping to answer the guiding question..."Is our creek safe for salmon?"

Thurston Conservation District's South Sound Global Rivers Environmental Education Network (GREEN) program has been supporting teachers and students with water quality and watershed studies for nearly 30 years. Originating as Budd-Deschutes GREEN in the early 1990's, it has since grown to serve teachers in the Henderson, Eld, and Totten Watersheds. South Sound GREEN strives to remove barriers to getting kids outside, and meets the needs of teachers by providing water quality training, curriculum resources, classroom presentations, scientific monitoring equipment, transportation costs, and overall support to teachers and schools.

Students analyze the levels of dissolved oxygen, pH, nitrates, turbidity, temperature and fecal coliform in the water, then fit the pieces of the puzzle together for an overall picture of water quality at their site. The data students collect is current and vital, and is reviewed by local jurisdictions, tribes and other stakeholders. Delegates from each class are selected to present their findings at the Annual Student GREEN Congress, occurring this year on Mar. 19, 2020 at The Evergreen State College. Delegates share data, discuss possible sources of pollution, and make recommendations to improve their watershed. Finally, these student scientists then share their findings with their community, by visiting watershed groups, local school boards, city councils and other groups.

Teachers are the real heroes in this program, finding time for additional curriculum and ways to make the outdoor field trip days possible. With Thurston County's population on the rise and the adoption of the Next Generation Science Standards, the need for this program is at an all-time high. After nearly three decades, interest in the South Sound GREEN program today is stronger than ever, with 65 teachers participating in the 2019-2020 school year! The continued success of this program is thanks in large part to support from the City of Olympia, City of Lacey, City of Tumwater, and Thurston County, as well as local and state funding sources. With this and support from the community, South Sound GREEN will be engaging the next generation of land and water stewards long into the future!

**Want to get involved?** We are seeking volunteers to assist with winter monitoring day on Feb. 13, 2020 and the Student GREEN Congress on Mar. 19, 2020 at The Evergreen State College. For more information about these events or the South Sound GREEN program, please contact Stephanie Bishop at [sbishop@thurstoncd.com](mailto:sbishop@thurstoncd.com).







**WIN!** Projects are a great alternative to parking lot carwash fundraisers, which create polluted wash water!

### City of Lacey WIN! Youth Program

- Contact Jenny Bauersfeld at [WaterResources@ci.lacey.wa.us](mailto:WaterResources@ci.lacey.wa.us) or 360-491-3214

### Thurston Youth WIN! Program

- Contact Ann Marie at [ann.marie.pearce@co.thurston.wa.us](mailto:ann.marie.pearce@co.thurston.wa.us) or 360-754-3355 ext.6857

## It's a *Win-Win* Situation!

### Youth Groups Can Earn Grants While Providing Community Service Through WIN! Programs

Community service benefits where we live, work and play and the people who are volunteering. For this reason, the City of Lacey & Thurston County created the Work Involvement Now! (WIN!) programs to encourage youth to get involved in our communities. Non-profit youth groups that complete an approved community service project can earn a grant to support their group.

**Youth groups can apply to do an approved project, such as:**

- Planting native trees & shrubs
- Watering newly planted trees & shrubs
- Helping maintain trails
- Removing invasive weeds
- Staffing a Stream Team booth at community events
- Painting fire hydrants
- Suggest their own project

Youth groups will receive a grant after completing an approved project. Weekend and weekday projects are available. A limited number of projects are offered each year. Visit **WIN.Thurston.Stormwater.org** or **ci.lacey.wa.us** and search WIN group to learn more about the program, how to apply and eligibility requirements.

## Bees & Other Pollinators

### Mason Bees & Bumblebees

Bees are some of the most important pollinators in the world. Nearly 85% of flowering plants reproduce by pollination from bees and other insects and one-third of the foods we eat are pollinated by insects. Without them, we would essentially have no flowers or food. Join Stream Team and guest speaker Mary Dessel as we look at the life history of honeybees, mason bees and bumble bees and what's affecting their decline and how we can each do our part to help. Mary has both a Bachelor's and Master's degree in Forestry with a focus in forest entomology. She worked ten years in the Olympic National Park's Hoh Rain Forest, teaching naturalist programs in river ecology, entomology and forest succession.

### Build A Bee House!

Following the talk, stay and build a simple "bee house" for your garden.

To register, visit [www.streamteam.info](http://www.streamteam.info) and click on "Register". For more information, contact Michelle at [mstevie@ci.olympia.wa.us](mailto:mstevie@ci.olympia.wa.us).



## BEES & OTHER POLLINATORS WORKSHOP .....

- Sat., Jan. 4 • 10 a.m. – Noon
- LOTT WET Science Center,  
500 Adams St NE, Olympia

## Featured Creature

### Old World Rats (*Muridae Rattus*)



### An Unpopular “Guest” (*Muridae rattus*)



Old World rats were introduced to the Americas and are now found on every continent except Antarctica. The family *Muridae* is originally native to Asia, Africa, Europe and Australia. Primarily what we find locally are Norway or brown rats and black rats or roof rats. Ironically, Norway rats were introduced to Norway from Asia. Both species have large eyes and ears, a pointed nose and a scaly tail. Brown rats (Norway) are larger than black (roof) rats, each approximately 16 inches in length, including tail. The brown rat weighs 8–16 ounces, whereas the black rat averages 5–9 ounces.

The roof rat gets its name as it is an agile climber finding shelter in upper parts of buildings and trees. These rats prefer warmer saltwater influenced climates and are more likely to board ships than brown rats, often being found in port and coastal cities. The brown rat prefers burrows, living almost everywhere humans are.

Rats are foragers that can survive on a huge range of food, which has helped them successfully spread throughout the world. They will feed on seeds, nuts, fruits, berries, and plants including agricultural crops. They may also eat slugs, snails, small rodents, reptiles, insects and even fish, shellfish and other aquatic organisms. One brown rat study found 4,000 different items in the contents of their stomachs. Both species are most active at dusk and during the night.

The two species have similar reproductive strategies: reproducing at an early age and having many large litters of offspring and being polygynandrous, meaning that females and males within a group have multiple partners. Females reach sexual maturity around three to five months old. Breeding is not seasonal, though it does increase in warmer months. Females go into estrus just 18 hours after giving birth and are capable of having up to seven litters a year. Female brown rats experience a six-hour period of estrus, during which they mate as many as 500 times with multiple competing males. Gestation is 21–25 days. Litters average around eight pups. The young take about two weeks to open their eyes and nurse for three to four weeks then leave the nest. Multiple females and litters may share a nest, and females nurse and provide care for the offspring of other females. Roof rats live one year in the wild reproducing up to 40 young. Brown rats are thought to live an average of two years.

Many issues arise from rat infestations including: crop destruction, structural damage, food contamination and vectors of diseases.

## CLIMATE SCIENCE 101 • •

- Wed., Feb. 12
- 6 – 8 p.m.
- Olympia City Hall, 601 E 4th, Olympia



## Climate Conversations: Climate Science 101

Join us in celebrating Darwin’s 211<sup>th</sup> birthday! Guest speaker Paul Pickett will discuss the basics of climate science—exploring the causes of global warming, impacts to our region, and ideas for solutions and adaptation. Paul is an environmental engineer with the Squaxin Island Tribe. He previously coordinated the Department of Ecology climate science network and taught climate science at The Evergreen State College.


To register, visit [www.streamteam.info](http://www.streamteam.info) and click on “Register”. For more information, contact Michelle at [mstevie@ci.olympia.wa.us](mailto:mstevie@ci.olympia.wa.us).



# Managing Rat Populations without Poisons

Rising numbers of Norway and black rats (aka roof rats) in the Pacific Northwest are posing serious problems for residents and businesses. Rats carry and spread disease, eat and contaminate food and destroy property. Experts estimate that there has been a 15 to 20 percent rise in global urban rat populations in the past decade. There are a few theories for this but scientists are not certain. One possible explanation is the rise in average temperatures and milder winters which can result in additional reproduction cycles over time. Another is the increase in edible trash that is readily available to rats.

So what can you do to manage or prevent a rat infestation? Successful control is not simple. Many of the methods, products and materials used to control rats and mice can be harmful. Anticoagulant rodenticides have been used for decades for rodent control worldwide. They are harmful to humans, dogs, cats, and wildlife and could pose an indirect threat to surface waters. Recent research findings show that second generation anticoagulant rodenticides also affect aquatic species.



**TIP:** Don't rely on cats, they prefer to hunt mice and may have a detrimental impact on bird populations.

## Use the following tips to manage rats without using poisons:

### Prevent Access to Food and Water

If you provide food for rats they will stay. Typical sources of food include birdseed, pet food, fruits and berries on the ground, bread crumbs, food waste, grease (e.g. such as an outdoor grill), and garbage.

- Prevent access to bird feeders. If a squirrel can reach the bird feeder, so can a rat.
- Keep garbage can lids closed tightly.
- Pick up fruits and vegetables in your yard.
- Feed dogs and cats inside and cleanup pet waste regularly.
- Fix leaky outdoor faucets, if possible, eliminate access to sources of water.
- Keep all stored food in rodent-proof containers.
- Use only rodent-resistant composters keeping lids tight.

### Prevent Access to Shelter

While outdoor food sources escalate rat problems, food is not the only draw for rodents. Yards with woodpiles, debris or old furniture lying around provide rats with nesting sites. Entry points to warm shelter both inside and outside the home add to the problem.

- Rat proof buildings. Look for gaps or holes inside and outside your home—mice can squeeze through a nickel sized hole, rats a half-dollar sized hole!
- Seal openings or gaps around doors and windows, kitchen cabinets, behind stoves and sinks, drainpipes, vents, power lines and cables, and cracks in siding or foundations. Use stainless steel mesh and caulk, lath screen, sheet metal, cement or hardware cloth to plug holes.
- Prevent rats from climbing buildings. Keep bushes, vines, and tree branches cut back at least 3 feet from your house. Place metal or thick plastic barriers over pipes.
- Move your woodpile at least twice a year and keep it elevated above the ground.
- Mow your lawn regularly.
- Keep yards and alleys clean—take junk to the dump!



(Kotthoff, M., Rüdell, H., Jüriling, H. et al. Environ Sci Pollut Res (2019) 26: 7315. See site for more information: <https://doi.org/10.1007/s11356-018-1385-8>)



## WHAT'S THAT WORD?

1. Fifty \_\_\_\_\_ ago on April 22, 1970, millions of people took to the streets to protest the negative impacts of 150 years of industrial development.
2. Old World rats were introduced to the Americas and are now found on every continent except \_\_\_\_\_.
3. Most storm drains lead directly to streams and creeks \_\_\_\_\_.
4. Building healthy soils and practicing smart watering can create a healthy \_\_\_\_\_ without harsh chemicals.
5. In 2017, the bald eagle was removed from the state's endangered species list as their \_\_\_\_\_ steadily increased.
6. While outdoor \_\_\_\_\_ sources escalate rat problems, food is not the only draw for rodents.
7. \_\_\_\_\_ are some of the most important pollinators in the world.

Here are seven statements that can be found in this issue of Stream Team News. Each sentence has a missing word or phrase. Complete the sentence and then find the word or phrase in the word search below. If you get stumped, the answers are at the bottom!

D	A	V	R	V	H	G	H	H	W	S	S	Q	S
G	N	Y	F	H	J	H	J	J	S	D	E	Y	W
T	T	U	G	J	U	B	N	I	D	F	F	A	E
U	A	I	H	Y	R	N	M	K	T	R	G	R	D
J	R	K	H	U	N	T	R	E	A	T	E	D	F
N	C	L	D	R	B	D	A	L	H	T	V	Y	T
R	T	F	O	O	D	C	D	P	N	Y	B	F	Y
E	I	N	S	I	J	B	W	U	K	G	N	R	G
W	C	G	X	F	I	G	E	N	M	H	H	F	H
X	A	R	C	V	O	H	I	B	B	B	Q	G	U
S	E	E	R	B	K	J	O	V	Y	N	A	V	I
W	T	W	T	N	M	I	J	N	E	M	U	B	B
Q	Y	C	G	P	O	P	U	L	A	T	I	O	N
U	H	V	H	S	S	R	B	D	R	U	O	U	B
J	N	B	Y	X	A	E	R	E	S	I	P	R	E
O	B	H	U	D	Q	W	D	C	I	J	K	P	E
L	V	J	J	C	W	X	E	N	O	T	L	L	S
P	U	U	M	G	R	Z	C	H	P	H	H	A	S

1. years 2. Antarctica 3. untreated 4. yard 5. population 6. food 7. Bees





# Stream Team *Events*

For additional events, event details or to register, please visit our website at [streamteam.info](http://streamteam.info) and click on the calendar icon.

## DECEMBER

### Amphibian Road Monitoring

Sat., Dec. 7, 21, Jan. 4, 18, Feb. 8, 22  
8 a.m. • Meeting place TBD

Surveys canceled if temps are 40°F or below.

To register visit [www.streamteam.info](http://www.streamteam.info) and click on "Register". For more information, contact Michelle at [mstevie@ci.olympia.wa.us](mailto:mstevie@ci.olympia.wa.us)

### Annual Allison Springs Bald Eagle Paddle

Sat., Dec. 14 • 9:30 a.m. – 2:30 p.m.  
Swantown Marina Boat House,  
1210 Marine Dr. NE, Olympia

To register, call City of Olympia Parks, Arts, and Recreation 360-753-8380 or visit [olympiawa.gov/experience-it](http://olympiawa.gov/experience-it). Program #7990 (Special Stream Team cost \$25)

Space is limited to 15 participants. Children ages 12–16 may attend with an adult, under 18 with signed permission. Moderate walking on uneven ground will be required. Kayaks and safety equipment and instruction provided.



## HOW TO REGISTER FOR EVENTS

Visit [streamteam.info](http://streamteam.info) and click on the calendar icon at the very top of the page.

Select the event for which you plan to register.

Follow the instructions to log in as an existing volunteer or create a new secure profile.

## JANUARY

### Bees & Other Pollinators

#### BEE TALK & BEE HOUSE WORKSHOP

Sat., Jan. 4 • 10 a.m. – Noon  
LOTT WET Science Center,  
500 Adams St NE, Olympia

See page 7 for details. To register, visit [www.streamteam.info](http://www.streamteam.info) and click on "Register". For more info., contact Michelle at [mstevie@ci.olympia.wa.us](mailto:mstevie@ci.olympia.wa.us).

### MLK Day of Service

#### OLYMPIA AREA:

Sat., Jan. 18 • 10 a.m. – 1 p.m.

LBA Woods, 3333 Morse-Merryman Rd SE, Olympia

#### LACEY AREA:

Mon., Jan. 20 • 10 a.m. – 1 p.m.

Woodland Creek Community Park,  
6729 Pacific Ave SE, Lacey

Join other enthusiastic volunteers for a day of comradery and celebration by volunteering with us for invasive plant removal and native planting to help restore our parks and natural areas.

See page 4 for details. Register online.

### Amphibians of the Pacific Northwest

Sat. Jan. 25 • 9:30 - 11 a.m.  
LOTT WET Science Center,  
500 Adams St NE, Olympia

### Amphibian Egg Mass Identification Field Training

Sat., Jan. 25 • 11:30 a.m. – 2 p.m.  
Hansen Elementary, 1919 Road Sixty-Five, Olympia

See page 5 for more details. **Please register separately for workshop, field training and surveys.** To register for this workshop, or to help survey egg masses, visit [www.streamteam.info](http://www.streamteam.info) and click on "Register". For more info., contact Michelle at [mstevie@ci.olympia.wa.us](mailto:mstevie@ci.olympia.wa.us).

### AMPHIBIAN EGG MASS SURVEY DATES

Sat., Feb. 1, 8, 29 & Mar. 7, 21, 28  
Thurs., Feb. 13 & Mar. 12  
Locations TBA

To register, visit [www.streamteam.info](http://www.streamteam.info) and click on "Register." For more info., contact Michelle at [mstevie@ci.olympia.wa.us](mailto:mstevie@ci.olympia.wa.us).

## UPCOMING

### Olympia Arbor Day

Sat., Mar. 14 • 10 a.m. – 1 p.m.  
Percival Landing, Olympia

### Climate Conversations: The Food Challenge

Fri., Mar. 27 • 6 – 8 p.m.  
Location TBD

## COMMUNITY EVENTS

### Ivy & Blackberry Removal

Monday, Jan. 20 • 9:30 a.m. – 3:30 p.m.  
Capitol Land Trust Parcel, North Olympia

Join WSU Ext./Native Plant Salvage to remove invasive plants on a Capitol Land Trust parcel in preparation for restoring with native plants in the fall.

For more info., contact Samantha at [info@nativeplantsalvage.org](mailto:info@nativeplantsalvage.org).

Register at [www.nativeplantsalvage.org](http://www.nativeplantsalvage.org)

### Winter Twig Identification Field Class

Sunday, Jan. 26 • Two options:  
9:30 a.m. – 12:30 p.m. OR 1 – 3:30 p.m.  
McLane Creek Nature Trail,  
5044 Delphi Rd SW, Olympia

Join WSU Ext./Native Plant Salvage to learn this unique skill to enhance your winter outings and help you identify native plants during restoration events!

For more info., contact Samantha at [info@nativeplantsalvage.org](mailto:info@nativeplantsalvage.org).

Register at [www.nativeplantsalvage.org](http://www.nativeplantsalvage.org)

### Native Plant Salvage Event

Sun., Feb. 2; Sat., Feb. 8; Sun., Feb. 23;  
Sun., Mar. 8 • 9:30 a.m. – 3:30 p.m.  
Register for location details.

Rescue native plants from development sites for later use in restoration projects! Tools & lunch provided.

For more info., contact Samantha at [info@nativeplantsalvage.org](mailto:info@nativeplantsalvage.org).

Register online.



2000 Lakeridge Dr SW  
Bldg 4 #100  
Olympia, WA 98502  
streamteam.info

## Annual Allison Springs Bald Eagle Paddle

Decades of pesticide use almost brought the bald eagle population to extinction. Then in 2017, the bald eagle was removed from the state's endangered species list as their population steadily increased. We witness this success on our annual bald eagle paddle. Join us this year for another spectacular event! Expert staff from Olympia Parks, Arts and Recreation will team with staff from Stream Team to experience the bounty of wildlife on Mud Bay. Come see the expanding population of bald eagles that arrive each year to forage on the last of McLane Creek chum salmon. Other species we might see include shorebirds, water fowl and great blue heron. NOTE: If temperatures drop to freezing or are icy the event may be canceled.

To register, call City of Olympia Parks, Arts, and Recreation at 360-753-8380 or visit [olympiawa.gov/experienceit](http://olympiawa.gov/experienceit) online. Program #7990 (Special Stream Team cost \$25)

Space is limited to 15 participants. Children ages 12–16 may attend with an adult, under 18 with signed permission. Moderate walking on uneven ground will be required. Kayaks, safety equipment and instruction provided.

### BALD EAGLE PADDLE •••••

- Sat., Dec. 14
- 9:30 a.m. – 2:30 p.m.
- Swantown Marina Boat House,  
1210 Marine Dr. NE, Olympia



### No Holiday Tree Program

The holiday tree program will not be offered this year. The nurseries are busy growing trees for us as they try to meet the demands of a statewide shortage.

