



# Wild at Heart

A YEARLY NEWS PUBLICATION FOR THE FRIENDS OF THE RIVER OTTER ECOLOGY PROJECT

## THE YEAR OF PEOPLE

Each year we spend an enormous amount of time seeking, following, watching and counting otters, musing on otters and moving forward with research to help us understand the otters' place in local ecosystems.

During 2017, we added more human connection and outreach than ever. We're a community science, research and education project and our goal is to support watershed conservation. That makes our connection with people vital. We strive to help everyone understand how necessary it is to all of us to hold onto every watershed protection we can, and to make progress wherever we can. Sometimes it seems like an uphill battle, and sometimes we wonder whether we will ever prevail. What keeps us going, besides considerable interest in the fascinating otters?

This year, it was the people. We headed down to the South Bay several times to spread the word about otters and get a handle on the southern extent of otter range by increasing Otter Spotter observations.

We made connections with new friends and partners, including the **Don Edwards SF Bay National Wildlife Refuge**, the **San Francisco Bay Bird Observatory**, the **Santa Clara Valley Audubon Society**, and reconnected with old friends like the **South Bay Clean Creeks Coalition**. *(continued on page 2)*



We were thrilled by the 10,000 people who came to Alviso County Park for Day on the Bay, a completely free festival of services and information including entertainment and lunch for thousands. I was truly heartened by the open-handedness and joy exhibited by the County and the hundreds of volunteers. And I got to sit and color otter masks with the kids. Try it sometime...it's good for the heart and soul.

We increased our education projects by orders of magnitude this year. We provided two hefty mini-courses on river otters and conservation including field days, kayak adventures, lab days, discussion days and final project days. Working with the students at **Marin Academy** and **Tomales High School** was an enduring pleasure. Getting outdoors and showing them otters, whales, pipefish, hunting osprey, seals and the wonders of nature, not to mention tracking otters by boat, is a very fine way to spend time. Knowing that the experiences the students have in nature will resonate throughout their lives and give them a reason to protect nature fulfills our hopes.

We didn't neglect the little kids, because we can't resist them and we nab every opportunity we can to reach children. We read otter books to tinies at libraries, we headed over to the **Children's Museum**



watersheds for OTTERS. [Check it out!](#) And I enjoyed consulting with **Artie Knapp**, children's author, and contributing otter information for his wonderful new book, *Little Otter Learns to Swim*, illustrated by the incomparable **Guy Hobbs**. It's a beautiful picture book for the little ones, published by Ohio University Press, and you can order it online, or by [emailing us](#).

This year we carpeted Napa with presentations, thanks to **WILD Napa**, who invited us to speak from St. Helena to American Canyon, with stops in between. These were just a few of our many speaking engagements throughout the Bay Area. Thankfully for us, we have **Robyn Aston**, **Brenden Collett-Grether**, **Stori Oates** and **Mary Ellen King**, who help with teaching and public presentations. We're very grateful for all our volunteers who work with us at events to spread the messages of conservation and otters far and wide. All our research and monitoring is of no use if we're not spreading the word, and that's why we spend so much time on the road, in the press, and writing about our work.

We all love animals, nature and our planet – that's a given. Finding and using the joy that comes with working in community, the satisfaction in connecting all the threads of our web of relationships to help us include everyone, provides the impetus that keeps us moving forward.

Best wishes from all of us,  
Megan Isadore, Executive Director

A handwritten signature in black ink that reads "Megan Isadore".



in Sonoma County for their inaugural **Science Speaker's Series**, and we joined up with **Kids for Positive Change** in Ohio. We had a great time with the students of Ashtabula, helping them act to conserve

## OTTER SPOTTERS AND CDFW: PROVIDING CLUES TO OTTER HEALTH

When Otter Spotters report a deceased otter, we pass the information to the California Department of Fish and Wildlife's Wildlife Investigations Lab. They collect and necropsy (animal autopsy) the animal. The purpose is to discover what may have caused or contributed to their deaths. Most deceased otters we discover are hit by cars, but there is still information to be gained. For example, most recently, otters killed by car strikes were found to have trace amounts of anticoagulant rodenticide poison in their tissues. Trace amounts are the tiniest amounts detectable, and would not have caused their death. However, it tells us that at some point the otters both ingested the rodenticide, probably through a prey animal. The fact that these incredibly potent and harmful poisons are being spread throughout wildlife populations is alarming. Organizations like Raptors Are the Solution are working hard to get the rodenticides banned in California, and have made some progress.



## THE SALMON AND THE OTTER



Lagunitas Creek and its tributaries not only host a vigorous population of river otters year-round, but are also the spawning ground for the largest wild population of critically endangered coho salmon (*Oncorhynchus kisutch*) remaining in central California. River otters are extremely interested in dining on salmon, as are people, raccoons, bobcats, herons, mergansers, and every other omni- and carnivore in the watershed. Salmon bring ocean nutrients upstream, nutrients normally unavailable to land-based creatures, and they show up to spawn just when food is becoming scarce for omnivores. In an intact, healthy watershed, predation upon salmon is a natural process and not a problem, but what about for spawning grounds cut off by dams, and fish populations already stressed and in trouble due to everything from climate change to pollution to overfishing and disease?

The quick answer is: it's complicated! While otters dine on spawning salmon, they also provide services to the salmon. All summer long, while young salmon are growing in the creek, river otters spend a good deal of time munching on Signal crayfish (*Pacifastacus leniusculus*). Signal crayfish are a fascinating species, but sadly for our local wildlife, (continued on page 4)

they're not native and they eat plenty of salmon fry (baby salmon). Otter prey studies in general, and [our prey species study](#) in Martinez, indicate that when available, otters eat mostly crayfish, even when there is a wide array of prey available. Crayfish are slow and easy to capture, unlike some other prey, such as fish and birds. River otters predated crayfish exert pressure on the population and may offer the tiny salmon a better chance of surviving the summer.

That's not all. River otters hunt large fish in eelgrass beds, the very same eelgrass used by many species of fish, crabs and smaller species, as nurseries. River otters hunting in those beds tend to frighten the large fish that prey on the smaller fish. So, river otters in Tomales Bay may very well offer the 5" juvenile salmon (smolts) some protection from being eaten by larger fish.



At the end of the 3-year coho life cycle, when salmon return to their birthplace to spawn then die, otters try to predate the spawners. When they manage to catch and eat one, the otters subsequently deposit scat along the river banks, thus helping fertilize important streamside vegetation, which in turn shades and helps keep the creek cold (necessary for salmon survival), and providing a home for insects that feed young salmon. The otters' place in our watersheds is multi-faceted, and we have much to learn about it. As always, protecting watersheds cannot be overestimated in protecting precious species, endangered like the salmon or thriving like the otters. ♦



# DON'T MISS NEW WEBSITE PIECES

Did you know we publish technical reports online, or that we have a blog? Have you reviewed our "Stuff We Need" link (our wish list) recently? Or looked at our updated Otter Spotter map for recent otter sightings? How about checked out our newest videos? If not, [tap on over](#) and enjoy...it's a great way to spend a rainy afternoon!

**DONATE NOW!**

# 2017 FINANCIAL REPORT



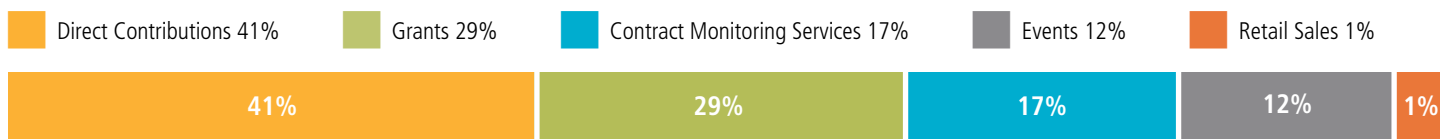
## STATEMENT OF ACTIVITIES

	TOTAL
<b>INCOME</b>	
Direct Contributions	\$ 35,090
Grants	24,240
Contract Monitoring Services	14,738
Events	10,275
Retail Sales	1,058
Cost of Goods Sold	-395
<b>Total Income</b>	<b>\$85,006</b>
<b>EXPENSES</b>	
Programs	\$66,114
Support Services	5,160
Fundraising	4,514
<b>Total Expenses</b>	<b>\$75,788</b>

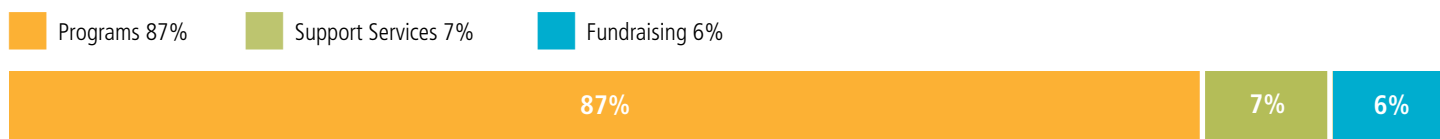
## STATEMENT OF FINANCIAL POSITION

	TOTAL
<b>ASSETS</b>	
Cash	\$ 40,448
Other Current Assets	3,072
Fixed Assets	7,318
<b>Total Assets</b>	<b>\$50,838</b>
<b>LIABILITIES</b>	
Current Liabilities	\$ 1,375
<b>Total Liabilities</b>	<b>\$ 1,375</b>
<b>EQUITY</b>	
Unrestricted Funds	\$ 34,541
Restricted Funds	14,922
<b>Total Equity</b>	<b>\$49,463</b>
<b>Total Liabilities &amp; Equity</b>	<b>\$50,838</b>

### INCOME



### EXPENSES



# WITH GRATITUDE

We are deeply thankful to all of our supporters. Each and every gift makes a difference and assists us with advancing our important mission to forward conservation and restoration by linking river otter recovery to watershed health through education, research, and community science.

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