



WEISER HIGH SCHOOL TEAM WINS ENVIROTHON

By Steve Stuebner

More than 80 kids from 10 high schools in Southern Idaho rolled into the Living Waters Ranch in Challis on a chilly Monday in May for an intense and competitive two-day natural resources education event called the Idaho Envirothon. It was the 24th year of the event.

The high school teams were sponsored by various soil and water conservation districts from their local areas. The kids intensively studied natural resource topics like soils, aquatics, forestry, wildlife, and this year's topic invasive species - for months before they arrived.

To prepare, the students had to engage with their teachers/advisors outside of normal school hours, similar to kids who participate in extracurricular sports activities. And when they arrived at the Envirothon, they had to be prepared and know

their stuff. Once there, everything happens really fast. Competitors must "think on their feet," so to speak, with very little time to think or prepare.

On the first day of the annual competition, student teams were whisked from one natural resources station to the next. They heard a 30-minute presentation on a natural resources topic like Forestry, and then took an extensive test for 15 minutes, the content of which may or may not have been covered fully by the presenter. After each test, they moved on to other stations.

On the evening of day 1, the kids took a break for 45 minutes and had dinner, and then were asked to solve one doozy of a challenging scenario involving Invasive Species. Teams had about three hours to figure out their unique solutions to the challenge, including preparing posters

that explained their solutions creatively, and to develop and choreograph an oral presentation involving all of the team members to be presented to a panel of judges the next morning.

Following the oral team presentations, the top 5 teams were selected and were to give their winning presentations before judges on the afternoon of the second day.

In the end, the team from Weiser High School took first place, based on the judges' scores for their oral presentation, their test scores at the various stations and a pre-Envirothon community service project they had to report on via a creative poster. The team was sponsored by the Weiser River Soil Conservation District.

For their hard work and excellence, the Weiser kids won an all-expense-paid trip

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to Toronto to compete in the 2016 International Envirothon!

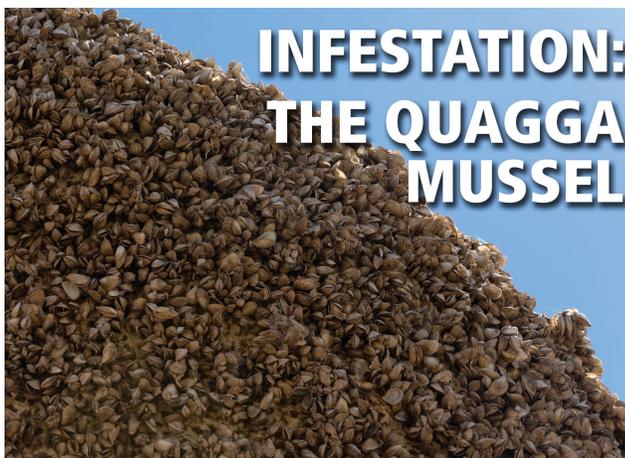
"Awesome! We're really excited," the kids said. "I think we worked together really well as a team. We've been working together all year, so that made a difference," said Kelsie Hemphill. "Everyone listened really well, and worked together really well."

Who are you going to call first to give them the news? "My mom," Hemphill said, echoing the thoughts of her teammates.

"Well, the kids worked really hard during the year, and they're all really good students, so I thought they'd have a pretty good shot," added Stuart Nesbitt, an agriculture and science teacher at Weiser High School.

Norman Wright, Chairman of the Idaho Soil and Water Conservation Commission, was impressed with the students' performances. "You know, this is the fourth year that I've judged the competition, and each year, I think we're going to hit the bar," said Wright of American Falls. "And every year, the bar seems to get moved higher."

"And it's amazing how quickly they can put together a presentation that they're given cold turkey. And all of a sudden, they come up with something wonderful. And the visual aids ... they come up with visual aids that you might pay someone thousands of dollars to produce, and the kids put it together in an hour."



"You see this and you just marvel, wow, American society might have a chance with these bright, great minds that we're producing. And you say, hey, there might be hope for us after all!"

The challenge question on which the Weiser High School students based their oral presentations, focused on a fictitious county in Idaho on the state's southern border, where two of three invasive species boat-check stations operated by the Idaho Department of Agriculture had to be shut down because of budget cuts. The students had to figure out how to intercept boats for inspection without check stations or figure out a way to fund the extra check stations with user fees or other methods. The students also had to figure out how to control invasive plant species and aquatic invasive species on popular small recreation reservoirs in the fictitious county.

All five of the final teams came up with solid solutions to make sure that no boats with invasive quagga mussels were able to enter Idaho without a full inspection, following the "Clean, Drain and Dry" procedure used by all ISDA check stations.

Many of the teams proposed a boating user fee or a season pass to pay for the extra check stations. And they increased the rates for exotic turtles and aquarium plants at pet stores so the invasive species don't end up getting dumped into a small reservoir and multiply and hitch-hike to other water bodies. Students were graded on 100% team member participation and their oral presentations delivery.



Students learned about aquatic invasive species.

All participating teams crafted creative posters to illustrate their solutions to control invasive plants, as well. At least one team recommended using goats and targeted grazing to deal with unwanted invasive plant species, and they had herds of goats on their posters along with baby goats in tow to eat the plants.

Chris Banks, Chairman of the Idaho Envirothon this year, and owner of Conservation Solutions, a private contractor based in the Soda Springs area, said the competition needs to be challenging enough to stretch the minds of smart kids.

"It's an opportunity for kids to come and learn about current topics and issues facing our natural resources to prepare them for the future," Banks said. "Envirothon prepares our youth to be the leaders of tomorrow so maybe if they're in public office, we don't have the juggernaut that we see in Washington D.C. today, that we have a group of kids who are trained, understand the issues that are facing our environment, facing our landowners. And they can work through those issues in a more harmonious fashion."

The annual Envirothon is the result of the efforts of a dedicated group of district, Commission, and NRCS employees and officials, and private sector companies and individuals like Banks. This year, Banks led the team of natural resources professionals to plan and carry out all the

WEISER WINS, *cont. from Pg. 2*

many logistics that make the event happen.

Banks said he is impressed the kids take time out of their busy lives to learn about natural resources. "It means a lot to the conservation districts for the kids to participate in activities like this," he said. "It's an additional educational opportunity for these students. It's not something that's required in class as part of their regular school setting. Most of these students are studying these topics on their own."

The Living Waters Ranch is a great facility for hosting the event, Custer Soil and Water Conservation District's Karma Bragg said. "This facility offers an opportunity for the kids to be in the water, to get into the trees, we have a soils pit that we dig for them, and it has plenty of space for putting up the kids overnight and feeding them in the main hall. It's much nicer than the days when we'd hold the event at a school, and everyone, including the teachers and advisors, had to sleep on the floor of the gymnasium."

One of Bragg's work mates, Roseanna Reith, a range management specialist for the Natural Resources Conservation Service, participated in the Envirothon when she was a student at

Challis High School. She felt it was good experience for a future career in natural resources.

"One of the great things about Envirothon is that it really allows you to develop the power of thought and engaging in critical thinking," Reith said. "You have to really think about how ecology and natural resources management fit into soils and wildlife and aquatics and forestry and whatever that current issue is that year, and meld all of those things together. Looking back now, in my profession, I deal with all of those things on a daily basis. I definitely feel that Envirothon set the ground work for everything that I deal with today."

Other results:

- Second place, Skyline High School in Idaho Falls, sponsored by the West Side SWCD.
- Third place, Gooding High School, Team A, sponsored by the Gooding Soil Conservation District.
- Fourth place, Mountain View High



School, sponsored by the same.

- Fifth place, Gooding High School, Team B, sponsored by the Wood River SCD.
- Spirit of Envirothon, Butte High School.

Organizations that contributed to financing the event include: *Agrium, *Conservation Basics, *Cascade Earth Sciences, *Bonneville County Cattle Association, *Highlands CWMA, *Idaho Barley Commission, *Idaho Association of Soil Conservation Districts, *Idaho District Employee Association, *Idaho Soil and Water Conservation Commission, *Idaho Barley Commission, *Idaho Mining Association, *Idaho Power Company, *Idaho Rangeland Resource Commission, *Idaho Community Foundation, *Idaho Sugar Beet Growers Association, *J. R. Simplot Foundation, *Living Waters Ranch, *Northwest Farm Credit, *Organic Valley Mountain Dairy, *Natural Resources Conservation Service, *K & S Fencing, *Frank and Kathy Weaver □

Steve Stuebner is a long-time natural resources writer in Idaho who will be producing a video and written feature story about the event for the Idaho Soil and Water Conservation Commission and LifeontheRange.org, sponsored by the Idaho Rangeland Resource Commission.



NASCA BOARD VISITS CONSERVATION THE IDAHO WAY

Conservation agency leaders from around the nation gathered recently for the National Association of State Conservation Agencies' (NASCA) annual Spring Board Retreat. Theirs was a typical meeting: packed agenda, productive discussions, and all that. But well, it was an indoor meeting held in one of Idaho's most beautiful outdoor settings. They wanted to breathe fresh air and learn about Conservation the Idaho Way. So Valley Soil and Water Conservation District (Valley SWCD) invited them to tour Lake Irrigation District's J-Ditch Collaborative Project.

"Lake Irrigation and Valley SWCD showed us a great, long-established project that really intrigued the group," said Teri Murrison, NASCA Pacific Region Director and Administrator of the Idaho Soil and Water Conservation Commission (Commission). "They deal with almost every water quality problem we have, but many Board members came here from states that never experience water shortages - where water rights are not at issue. They

appreciated the creativity of the fix."

It was a very necessary fix, as there were problems with the J-Ditch losing water due to seepage. Located about seven miles downstream from Payette Lake, Cascade Reservoir was created in 1949 for flood control, irrigation storage, and power generation. The Lake Irrigation District had approached the Valley District and the Soil Conservation Service (SCS, now NRCS) in 1985 to design a pipeline that would deliver irrigation water to more acres. They determined that a gravity pipeline and sprinkler system was feasible.

Another problem was as the years went by, McCall's wastewater plant ultimately discharged about 4,300 kg of phosphorus into the North Fork Payette River annually, which was responsible for big water quality problems downstream. Twenty-three head of cattle died after ingesting toxins from blue-green algal blooms in the Reservoir during a string of drought years.

Valley SWCD and Lake Irrigation District had already considered the use of effluent as irrigation water and saw an opportunity to solve both water quantity and quality problems. They developed and submitted a new project proposal to DEQ. A watershed advisory group was formed, and Valley SWCD, NRCS, the Commission, and West Central Highlands RC&D came on board. After meetings and negotiations, in late 1996 the J-Ditch Pipeline agreement was in place.

The Pipeline portion ultimately provided water to 5,000 acres - fresh water to 2,000 acres, and enriched effluent water to another 2,050 acres. There is 200' of fall from top to bottom of the system with sprinkler operating pressures between 45-65 psi. There are more than 18,000' of 30" diameter PVC pipe, a total of 93,000' of PVC pipe, 14 spur lines for fresh water, and 6 for enriched water. On-farm systems included 6 wheel lines totaling 7,200', 16 center pivot systems, 2,050 acres irrigated under gravity pressure, 26,000' of PVC

pipe, 12 freshwater pumps, and 40 stock watering systems incorporating 32,000' of pipeline.

The project had two funding components: water quality (\$14.8 million funded by a McCall bond, DEQ loans and grants, and two Bureau of Reclamation grants), and water conservation (\$3.696 million funded by a grant to the Valley District by the Commission's State Agricultural Water Quality cost sharing program (SAWQP), DEQ, RCS, landowners, a state General Fund appropriation, and the City of McCall). The pipeline was completed in October 1997. The on-farm irrigation systems were completed the following June.

Murrison said the results have been impressive over the years. "By eliminating ditch seepage, converting to sprinkler irrigation, and substituting effluent for irrigation water," she noted, "a total savings of 6,180 acre feet of water are realized every 90-day irrigation season. And as a result, Cascade Reservoir has seen a reduction of 605 kg per year since 1997. The City of McCall's waste water treatment plan has reduced phosphorus by 4,307 kg per year. These are some impressive totals."

Other benefits realized include energy savings from the gravity-flow system's elimination of pumps and reduction of pump horsepower necessary to irrigate. Valley SWCD's SAWQP cost sharing helped install 40 stock watering troughs.

The J-Ditch Project's collaborative solutions helped restore beneficial uses in Cascade Reservoir, helped solve McCall's water quality problem, and conserved water while improving irrigation delivery and application.

The NASCA Board gained a new sense of appreciation for the challenges of dealing with water supply challenges and for Conservation the Idaho Way.

Members told Murrison that the Idaho Spring Board Retreat just may have been the most interesting and best one ever. But don't tell the other states!

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