

LANCE GRIFF AND TIM CORNIE: NATIONAL SOIL HEALTH CHAMPIONS , TWIN FALLS-AREA FARMERS

By Steve Stuebner

Two Twin Falls County farmers recently received national honors from the Soil Health Champions Network for being leaders in no-till, direct-seed farming in their community.

Lance Griff, who farms 3,700 acres with his father in the Salmon Falls tract, got into no-till farming four years ago as a way to conserve water in an arid region that is often water-short. "I'm trying to be as water-conscious as possible," Griff says. "I'm trying to stretch my water as far as possible."

The network is sponsored by the National Association of Conservation Districts in hopes of advancing the adoption of soil health practices nationwide. The National Resources Conservation Service (NRCS) also has been promoting no-till, direct-seed farming through a national Soil Health Initiative, launched several years ago.

In some dryland farming areas in Idaho, such as the Camas Prairie in North Idaho, no-till farming has become very popular, embraced by more than 80 percent of the farms. In southern Idaho, it's a much smaller percentage, but it's growing

So much so that we believe improving the health of our Nation's soil is one of the most important endeavors of our time."

Steve Schuyler, District Conservationist for NRCS in Twin Falls County, said he is glad to see Griff and Cornie working on soil health initiatives. "These two guys are the leaders in Twin Falls County," he says. "They're just fun to work with. They really think things through."

Schuyler helped organize the Magic Valley Soil Health Forum last year. Griff and Cornie are participating in the forum,



Checking the soil for worms and other organic matter is important for no-till farmers

Tim Cornie runs a 650-acre organic farm in the "Miracle Mile" area in the Thousand Springs region near Buhl. He's been no-till farming for 8-10 years now. "I've been through the learning curve, made some mistakes and sacrificed some income from making those mistakes, but that's part of the process," he says. "I still feel that no-till is the way to go."

The two farmers were among approximately 150 nationwide who were recognized for their pioneering efforts by the national Soil Health Champions Network.

slowly. We have reported in past editions of *Conservation the Idaho Way* about multiple soil and water conservation districts – from Madison County to Canyon County – that have bought direct-seed drills that local farmers can rent to try no-till practices on their farms.

"Soil is a living and life-giving substance, without which we would perish," the NRCS soil health web site says. "As world population and food production demands rise, keeping our soil healthy and productive is of paramount importance.

along with about 8-10 other farmers, so far. They met once a month over the winter to talk about what's working, what isn't working, and areas where they might be struggling to find answers. They will continue to meet to share ideas and host field trips.

"We probably learn more from our mistakes than our successes," Cornie says.

"This is new stuff to me, too," Schuyler says. "We're all learning here."

SOIL HEALTH CHAMPIONS, cont. from Page 1*New crop coming up above wheat stubble*

By definition, soil health best practices encourage no-till, direct-seed farming to allow the soil organic material to grow, allow earthworms to thrive, and encourage microbial activity to flourish in the soil profile. “We’re not doing anything new; we’re going back to the old practices (before synthetic fertilizers). Healthy soil is healthy food,” Cornie told the Twin Falls Times-News.

Many no-till farmers plant cover crops after they have harvested their cash crops to feed and energize the microbes in the soil, and some graze the cover crops with livestock to add manure and organic matter to the soil and save money on livestock feed. Some farmers make extra money by renting out fields with cover crops for grazing.

Healthy soil has been shown to retain water better, with large amounts of residue at the top of the soil profile to absorb it, filter it and release it into the soil profile below. Residue reduces water runoff to a minimum, decreasing soil and water erosion. The use of cover crops also can greatly reduce or eliminate wind erosion from farm fields.

The age-old practice of tilling the soil to prepare fields for planting is a hard thing to overcome, however. Former NRCS State Agronomist Marlon Winger, who now works as a regional agronomist in the Northwest, gives a demonstration by taking a shovel, raising it over his head, and slamming it into the soil.

“You see, the first thing is we can’t continue to pulverize the soil and solve the world’s problems,” Winger says. Suddenly this mild-mannered fellow is on a tear. “Some people say that tilling the soil is the equivalent of dropping an atomic bomb on the farm. It destroys the microbial community that’s growing in the soil.”

But to convince farmers to change the way they’ve been farming their whole life is hard. “We all grew up thinking that the more we till, the more we fluff up the soil, like roto-tilling the garden in the spring,” Winger says. “It’s almost like trying to change your religion!”

Schuyler says he is glad to see Griff, Cornie and others trying no-till farming to improve soil health. “Most guys are a little skeptical. They’re peeking over the fence to see how their neighbor is doing. I think it will catch on. But I don’t think it will catch on like a wildfire,” he says.

But he sees a big upside in terms of improving soil health and reducing soil erosion. “In March and April, which can be our windiest months, we can end up with a lot of wind erosion,” he says. “We need to see more of it here to save our soil. But a guy needs to plan when he starts trying this stuff. Everybody’s operation is different.”

Griff started trying no-till practices on a test plot of about 65 acres of their family farm. They grow wheat, dry beans, corn, alfalfa and dry peas. The typical crop rotation is from wheat to corn to dry beans and back to wheat.

He worked with a custom operator who had his own no-till seed drill. “We’ve been using that to drill wheat into dry bean residue,” Griff says. “We also have a row crop planter set up for no-till that’s been working real good.”

Last year, he says, a year with plenty of irrigation water, they “went full scale” adding more acres. They planted silage corn into standing wheat stubble. They irrigate with center pivots. Previous to no-till farming, he said they would have to create dams and dikes in the field to hold the water from running off the field too quickly. With the old crop residue on the field, it retained the water completely.

“It had the structure for the water to infiltrate into the soil,” he says.

Now, when he checks on his soil, he’s seeing earth worms thriving inside the soil profile. And he has enjoyed the substantial savings of not having to spend money on fuel to till the fields.

Weeds continue to be a problem, however, and he sprays the weeds in a timely manner to get rid of them.

Griff has been using 6-7 species for his cover crops after the cash crops have been harvested. They’ve been planting radishes, barley, oats, sun hemp and lentils. NRCS’s Schuyler has been helping him choosing the right mix. “We’re doing that for soil health and to feed the microbes,” he says.

*Cover crops give back to the soil and feed microbial activity in the soil*

SOIL HEALTH CHAMPIONS, cont. from Page 2



Buhl organic farmer Tim Cornie, left, checks out a cover crop with an associate on his organic farm

Griff also has been using more compost and manure for fertilizer. “We’ve been cutting back on the traditional fertilizers, and working more on building up the soil. The compost and manure are good food sources for the microbes in the soil,” he says.

Tim Cornie runs an organic farm, raising organic corn, wheat, barley and corn silage. They also raise a type of split corn, a self-pollinating variety, and feed barley. He bought a no-till drill from a friend in Idaho County.

He’s been using less water with the no-till method, and he’s been seeing more earth worm activity in the soil. “My worms just took off with the no-till,” he says.

One thing he’s learned about growing corn with the no-till method is that he needs to create a space of about 3 inches of clean dirt around the corn seeds for the water to reach the seeds and the sun to infiltrate and encourage growth. He tweaked the corn planter to create the space around the seeds.

“That one little trick will make all the difference,” he says.

He’s also done some plowing to deal with weeds. “I had to go back to that method for better weed control,” he says. “You have to kill the weeds.”

Cornie’s daughter, Charlie, 16, does all of his biology work, checking the soil for microbial activity. It’s all trending in the right direction, he says. One thing he’s learned ... for every 1 percent increase

in organic matter in the soil, 30 units of nitrogen, phosphorous and potassium become available in the soil.

Cornie is trying one thing that seems novel – he’s creating a custom tea to energize the microbes in the soil. He creates the tea cocktail with worm casings, kelp, seaweed and molasses. And then he sprays the tea onto the soil with his pivots.

“I did two or three applications during the growing season per field,” he said.

Next year, Cornie is going to try putting three pounds of red clover into the water and spray it on his corn crop when it’s knee-high.

In contrast to Griff, Cornie is phasing out the use of manure for fertilizer. He sees some soil compaction occur with ma-

nure, and the manure can carry unwanted seeds of weeds into his fields. “It’s in my best interest to back away from it,” he says.

Cornie has been using peas and lentils for cover crops, and he’s contemplating using hairy vetch. Brad McIntyre, a no-till farmer in Canyon County, recommends using that to increase nitrogen levels in the soil.

Cornie also grazes his cover crops with cattle. Next year, he’s got 2-3 bands of sheep lined up to graze on his cover crops. He’ll make extra money from that initiative, and he’ll benefit from the sheep fertilizing the soil with their droppings.

Both Griff and Cornie say that they would recommend no-till farming to other farmers to improve soil health, reduce water use, decrease soil and water erosion, cut down or eliminate chemical applications, save money on fuel, and more.

“It will increase your bottom line and soil health,” Griff says.

“I highly recommend it,” Cornie says.

To learn more about the Magic Valley Soil Health Forum, contact Steve Schyler with NRCS in Twin Falls, 208-733-5380 or Steve.schyler@id.usda.gov.

NRCS Soil Health link: <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health/>

Steve Stuebner writes conservation success stories on a regular basis for the Conservation Commission.



Harvesting corn crop

CONSERVATION THE IDAHO WAY: youth competitions



NORTH IDAHO FORESTRY CONTEST CELEBRATES 35TH YEAR

The Idaho Department of Lands, Bonner Soil and Water Conservation District, U.S. Forest Service, and Natural Resources Conservation Service will host the 35th Annual Idaho State Forestry Contest on May 11 from 8 a.m. to 2 p.m. at the Delay Farm in Careywood, Idaho. Students from as far north as Bonners Ferry and as far south as Nez Perce and Craigmont in Idaho plan to compete in this year's contest.

The Forestry Contest introduces hundreds of students in grades 2 through 12 to basic forestry and resource management skills on three educational courses. More than 180 volunteers from local businesses, agencies and organizations will donate their time to help run the contest.

The three courses offered at the contest include:

- A non-competitive Novice Course for elementary school students with several hands-on activities and a walk through the woods guided by a professional forester
- The Rookie Course, an introductory competition for 6th graders with four scored stations including Tree Identification, Compass and Pacing, Timber Cruising, and Log Scaling; and 2 introductory stations not scored including Silviculture and Map Reading

- The Junior/Senior Division Competition, for students in grades 7 through 12, which challenges junior and senior high school contestants on 10 areas of forestry and resource management expertise

The Top Individual contest winners in the three competitive divisions receive awards and Junior and Senior Division individuals also win cash prizes. The first-place Junior and Senior Division teams take home a full-sized crosscut saw trophy to display until next year's contest, and the winning Rookie Division team receives an Idaho trophy made from all nine commercial woods grown in the state.

Each year, a long-time volunteer or contributor to the Forestry Contest is selected to serve as the Honorary Chairperson for the day, and Ray Delay Jr. has been selected for 2017. Ray grew up on the Delay Farm, the site of the Idaho State Forestry Contest for 35 years, with his mom Fairy, dad Ray, and brother Gene. His grandfather, Tony Delay, immigrated here from Italy in 1908 and bought the property exactly 100 years ago. Ray Jr. has an Ag/Econ degree from UI, and has been the Manager at the Co-op in Bonner County for 20 years. Ray loves to share the legacy of hosting the Forestry Contest and his appreciation and knowledge of his family's Idaho Tree Farm – its abundance, solitude, and serenity – with young generations of Idaho citizens.



Skyline High fielded a winning team this year.

SKYLINE WINS ENVIROTHON

This year's 25th Idaho Envirothon was held last month in Challis at the Living Waters Ranch. The winning team was Skyline High School, sponsored by the West Side Soil and Water Conservation District.

Skyline was back for a second year, coming back strong after last year's close race and loss to Weiser River's team. On the team were Captain Alex Reed, Heather Casper, Stephen Casper, Ethan Baver, and Mochen Ma. The team was coached by Greer Saechao and Kao Saechao.

The team will represent Idaho at the 2017 National Conservation Foundation (NCF) Envirothon competition in Emmitsburg, Maryland. The annual NCF event, featuring teams from the US, Canada, and China, will be held July 23-29, at Mount. St. Mary's University.

This year's second place winner and Spirit of Envirothon Award went to Rigby High School. Team members included Captain Jacob Sutton, Dalton Johnson, Nate Scott, Alesha Kisner, and Jordan Gardner. Advisors were Lex and Rachelle Godfrey.

Coming in third was the team from Weiser High School. Captain Philip Soulen, Llane Gibson, Haley Turner, Mikel Davies, and Estaban Rivera were advised by Stuart Nesbitt.

Gooding High School's Team A came in fourth. Captain Tori Anderson, Cassie Woodland, Tyra Runser, Yanet Rosales,

FORESTRY CONTEST, cont. from Page 4

Sponsors of this year's Contest included:

- Natural Resources Conservation Service
- David Ritz Memorial—Rick & Sherri Ritz
- Xmas Hills
- Senator Shawn Keough
- Inland Forest Management
- Co-op Country Store
- Boundary County Farm Bureau
- Idaho Forest Group
- Idaho Assoc. of Soil Cons. Districts
- Idaho Forest Owners Assoc.
- Idaho Tree Farm Committee
- Idaho District Employee's Assoc.
- Kurt & Sandy Koetter

- Idaho Soil & Water Conservation Comm.
- McFarland Cascade Pole & Lumber
- Stimson Lumber
- Bonner County Farm Bureau and
- Bonner County Sportsmen's Assoc.

Conservation districts contributing included:

Ada, Adams, Bear Lake, Benewah, Boundary, Butte, Camas, Custer, Clark, East Side, Elmore, Kootenai-Shoshone, Latah, Madison, Portneuf, South Bingham, Weiser River, and West Side.

In-kind contributors were:

Lighthouse Inc., Coeur d'Alene Tractor, Idaho Forest Products Commission, Custom Den, Wood's Meat Processing, Yoke's Fresh Market, Super 1 Foods, Frito Lay, Bonner County Waste Management, Ace Septic Service, GII2, and Mak's Signs. □

JOHN FIRTH, CONSERVATIONIST & ALL-AROUND GREAT GUY, PASSES

Idaho's conservation partners, his family, and his community are mourning the loss of John Firth. John was married to our ground water program manager Carolyn Firth, a father to three sons and their wives, a grandfather, and a supervisor and past chairman of the Mindoka Soil & Water Conservation District board.

Before passing, John was actively involved in the district's day to day operations, pursuing grant funding, and spearheaded a number of major projects. The Idaho Association of Soil Conservation Districts recognized John as their 2015 Doyle L. Scott award winner. The Doyle Scott award is given annually in remembrance of the well-respected past district supervisor and Commission administrator, and honors outstanding leadership in natural resources conservation.

John was proud of his district's Direct Seed/Cover Crop Project. Working with colleagues, he secured a Conservation Innovation Grant to purchase 2 direct seed drills and cover crop seed to improve overall soil health and increase water holding capacity in the soil. The Minidoka Board partnered with East Cassia and West Cassia Soil & Water Conservation Districts to extend the project to as many producers as possible and is credited with seeding about 1,500 acres so far.

A few years ago, A&B Irrigation District approached him about helping them do

an expensive pipeline to supplement an outdated water conveyance system and deliver water to areas where wells had dried up. John arranged a meeting with NRCS, a series of public meetings, and face to face conversations with neighbors, convincing them to sign over their Farm Bill money to help fund the project, contributing \$ 3,800,000 to the project and making it possible.

Beyond conservation, he supported the local high school Ag program and convinced the Idaho Transportation Department to install a sign commemorating the WWII POW Rupert Camp. John had semi-retired in recent years but continued to farm part-time with a son, run a small business in town, serve in his church, and undergo cancer treatment.

He passed away surrounded by family and friends at the Huntsman Cancer Institute in Salt Lake City, Utah, on April 24th from complications related to a nearly seven-year battle with cancer.

John was born July 7, 1952, in Brigham City, Utah, to loving parents, John Ray Firth and Verna Lucille Lind. He was the third of seven children. John was raised on a farm and ranch in Lynn, Utah and later moved to Tremonton, where he enjoyed many summers hauling hay, riding horses, working cattle (including the family milk cow), and many other farm related duties. His love for animals



continued throughout his life.

John was a member of the Church of Jesus Christ of Latter-day Saints where he served in many capacities over the years. Scouting and working with youth was a hallmark of his life. He lived his religion through service. He loved spending time with his sweetheart, Carolyn, whom he married in the Salt Lake Temple in 1984. He always enjoyed working with his sons on the farm. He continually tried new ventures including construction projects, farm improvements, and operating other businesses. Hard work, dedication, and his sense of humor, defined his character.

He was a kind man, a good-natured fixture at regional and statewide conservation meetings and conferences. We're really going to miss our friend John and send our condolences to all who knew and loved him. □

ENVIROTHON, cont. from Page 4

and Brett Larsen were advised by Becky Freiberg and Tom Woodland.

In 5th place was Gooding High School's Team B. Captain Jennifer Pineda, Laken Tsetsakis, Derik Wright, Garrett Jones, and Callie Graves were coached by Becky Freiberg and Tom Woodland.

Individual high school station winners were: Rigby in Forestry; Skyline in Soils, Weiser in Wildlife, Gooding's Team B in Aquatics/Ecology, and Weiser in the current issue.

The Idaho Envirothon's sponsoring organizations and individuals included: 34 contributing soil and water conservation districts (Ada, Adams, Balanced Rock, Blaine, Bonner, Boundary, Butte, Canyon, Caribou, Clark, Custer, East Cassia, East Side, Elmore, Gooding, Idaho, Jefferson, Latah, Lemhi, Madison, North Side, Minidoka, Oneida, Portneuf, Power,

South Bingham, Snake River, Squaw Creek, Teton, Twin Falls, Weiser River, West Cassia, West Side, Wood River, and Yellowstone).

Also sponsoring were Conservation Basics, Bonneville County Cattle Association, Idaho Barley Commission, Idaho Association of Soil Conservation Districts (IASCD), the Idaho District Employee Association, the Idaho Soil & Water Conservation Commission, the IASCD's Ladies' Auxiliary, Idaho Rangeland Resource Commission, Idaho Sugar Beet Growers Association, Idaho Farm Bureau Federation, Idaho Ag Credit, Living Waters Ranch, National Wild Turkey Federation, the Natural Resources Conservation Service (NRCS), and Frank and Kathy Weaver. Sponsoring soil and water conservation districts included: Butte, Custer, East Side, Gooding, Jefferson, North Side, Valley, Weiser River, and West Side.

The Idaho Envirothon Committee wishes to thank this year's volunteers and judges from the Commission, IASCD, Idaho Rangeland Resource Commission, NRCS, Lemhi and Custer County Extension, Teton SCD, Lemhi After School Promise, The Nature Conservancy, Friends of the Teton River, Idaho Department of Environmental Quality, the Portneuf, Oneida, Idaho, Yellowstone, East Side, Butte, Power, Caribou, and Jefferson conservation districts, Conservation Basics, and the North American Envirothon Committee.

For more information, visit <http://idahoenvirothon.weebly.com>. □

LOW INTEREST LOANS

- Sprinkler Irrigation
- No-Till Drills
- Livestock Feeding Operations
- Fences
- Solar Stock Water
- Pump Systems

INTEREST RATES AS LOW AS 2.5%

TERMS 7 TO 15 YEARS



www.swc.idaho.gov • 208-332-1790

COMMISSION BOARD APPOINTMENT OPENING IN DIVISION 4

Interested in serving? The Governor's office is accepting applications to fill the remainder of a term representing southern Idaho's District 4 on the five-member Idaho Soil & Water Conservation Commission Board.

Commissioner Glen Gier of Twin Falls announced his retirement from the Board effective June 30, 2017. The term extends through June 30, 2020.

The Commission provides technical assistance and programs to accomplish voluntary agricultural stewardship projects throughout the state working with local conservation districts, the Natural

Resources Conservation Service, and other partners.

Board members are appointed by the Governor to five-year terms. The Board establishes policy and appoints the Commission's administrator.

For more information on the appointment, contact Ann Beebe in the Governor's office at 208-334-2100 or by email at ann.beebe@gov.idaho.gov.

Further information about Board responsibilities and the Commission's programs can be obtained by visiting www.swc.idaho.gov or by calling Teri Murrison at 208-332-1790. □

COMMISSION

- H. Norman Wright, Chairman
- Jerry Trebesch, Vice Chairman
- Leon Slichter, Secretary
- Glen Gier, Commissioner
- Dave Radford, Commissioner
- Teri Murrison, Administrator



SOIL & WATER CONSERVATION COMMISSION

322 East Front Street, Suite 560 • Boise Idaho 83702 • P: 208-332-1790
F: 208-332-1799 • info@swc.idaho.gov • www.swc.idaho.gov

Conservation the Idaho Way: Sowing Seeds of Stewardship