



CONSERVATION DISTRICT

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Nominee winner for the 2020 Farm/Ranch Soil Conservation Award

Jerry & Margaret Pier are being formally acknowledged for their sacrifices & dedication towards conservation of our area's natural resources. The Hughes County Conservation District nominated Jerry & Margaret Pier as 1 of 5 area producers for the 2020 Farm/Ranch Soil Conservation Award.

Jerry Pier is a man of conviction he knows what he wants, and he strives to achieve that outcome. Not only did Jerry immediately step up and serve as a board member on H.C.C.D's board when it was needed, but while a board member he was always ready to ask questions, give advice and then experiment with employees, policies, and directives in order to ensure that the district was doing everything in its powers to conserve the natural resources within their area. From tree plantings, to duck habitat plantings and pollinator plantings utilizing no till systems, to clipping grasses and helping with leaf cutter bee systems, experiments and results. Jerry jumps in with both feet as soon as

"conserving the natural resources" is mentioned.



HCCD Board Member Jesse Foster (Left side) is shown presenting Jerry & Margaret Pier (Right Side) the 2020 Farm/Ranch Conservation Award certificate in front of the signage that was installed by HCCD on Jim's property.

Nominee winner for the 2020 Farm/Ranch Soil Conservation Award

Jim Feller and his family are being formally acknowledged for their sacrifices & dedication towards conservation of our area's natural resources. The Hughes County Conservation District nominated Jim Feller as 1 of 5 area producers for the 2020 Farm/Ranch Soil Conservation Award.

Jim Feller is a man of conviction, he knows what he wants, and he strives to achieve that outcome. From the numerous tree plantings that he has installed to those he plans to install, from CRP grass plantings and pollinator plantings, to the numerous food plot plantings along with normal cash crop plantings that he accomplishes each spring all utilizing no till systems. Jim jumps in with both feet as soon as "conserving the natural resources" is stated, he is very good at researching projects and then completing those projects in a timely manner.



HCCD Board Member Brent Pries (Right side) is shown presenting Jim Feller (Left Side) the 2020 Farm/Ranch Conservation Award certificate in front of the signage that was installed by HCCD on Jim's property.

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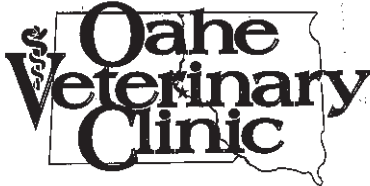
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Dates To Remember

March 5, 2021 – Signup ends for Quality Loss Adjustment Program

March 15, 2021 – 2021 ARC/PLC election and enrollment end for crop year

March 15, 2021 – NAP signup ends

March 15, 2021 – CRP Grassland signup begins

March 31, 2021 – last day to get a Marketing Assistance Loan for 2020 Wheat, barley, canola, crambe, flaxseed, honey, oats, rapeseed and sesame

April 23, 2021 – CRP Grassland signup ends

May 31, 2021- Last day to get a Marketing Assistance Loan for 2020 corn, soybeans and other oilseeds, and grain sorghum



CRP GENERAL SIGNUP ENDS FEBRUARY 12

Agricultural producers and private landowners interested in the Conservation Reserve Program (CRP) can sign up for the popular program beginning Jan. 4, 2021, until Feb. 12, 2021. The competitive program, administered by USDA's Farm Service Agency (FSA), provides annual rental payments for land devoted to conservation purposes.

Through CRP, farmers and ranchers establish long-term, resource-conserving plant species, such as approved grasses or trees, to control soil erosion, improve water quality and enhance wildlife habitat on cropland. Farmers and ranchers who participate in CRP help provide numerous benefits to their local region and the nation's environment and economy. CRP general signup is held annually and is competitive; general signup includes increased opportunities for wildlife habitat enrollment through the State Acres For Wildlife Enhancement (SAFE) initiative.

New cropland offered in the program must have been planted for four out of six crop years from 2012 to 2017. Additionally, producers with land already enrolled but expiring on Sept. 30, 2021, can re-enroll this year. The acreage offered by producers and landowners is evaluated competitively; accepted offers will begin Oct. 1, 2021.

QUALITY LOSS ASSISTANCE NOW AVAILABLE FOR ELIGIBLE PRODUCERS AFFECTED BY 2018, 2019 NATURAL DISASTERS

The U.S. Department of Agriculture's (USDA) Farm Service Agency (FSA) today announced that signup for the Quality Loss Adjustment (QLA) Program will begin Wednesday, Jan. 6, 2021. Funded by the Further Consolidated Appropriations Act of 2020, this new program provides assistance to producers who suffered eligible crop quality losses due to natural disasters occurring in 2018 and 2019. The deadline to apply for QLA is Friday, March 5, 2021.

Eligible Crops

Eligible crops include those for which federal crop insurance or Noninsured Crop Disaster Assistance Program (NAP) coverage is available, except for grazed crops and value loss crops, such as honey, maple sap, aquaculture, floriculture, mushrooms, ginseng root, ornamental nursery, Christmas trees, and turfgrass sod.

Additionally, crops that were sold or fed to livestock or that are in storage may be eligible; however, crops that were destroyed before harvest are not eligible. Crop quality losses occurring after harvest, due to deterioration in storage, or that could have been mitigated, are also not eligible. Assistance is based on a producer's harvested affected production of an eligible crop, which must have had at least a 5% quality loss reflected through a quality discount; or for forage crops, a nutrient loss, such as total digestible nutrients.

QUALIFYING DISASTER EVENTS

Losses must have been a result of a qualifying disaster event (hurricane, excessive moisture, flood, qualifying drought, tornado, typhoon, volcanic activity, snowstorm, or wildfire) or related condition that occurred in calendar years 2018 and/or 2019. Assistance is available for eligible producers in counties that received a qualifying Presidential Emergency Disaster Declaration or Secretarial Disaster Designation because of one or more of the qualifying disaster events or related conditions. Lists of counties with Presidential Emergency Disaster Declarations and Secretarial Disaster Designations for all qualifying disaster events for 2018 and 2019 are available. For drought, producers are eligible for QLA if the loss occurred in an area within a county rated by the U.S. Drought Monitor as having a D3 (extreme drought) or higher intensity level during 2018 or 2019. Producers in counties that did not receive a qualifying declaration or designation may still apply but must also provide supporting documentation to establish that the crop was directly affected by a qualifying disaster event.

APPLYING FOR QLA

When applying, producers are asked to provide verifiable documentation to support claims of quality loss or nutrient loss in the case of forage crops. For crops that have been sold, grading must have been completed within 30 days of harvest, and for forage crops, a laboratory analysis must have been completed within 30 days of harvest.

Some acceptable forms of documentation include sales receipts from buyers, settlement sheets, truck or warehouse scale tickets, written sales contracts, similar records that represent actual and specific quality loss information, and forage tests for nutritional values.

FUTURE INSURANCE COVERAGE REQUIREMENTS

All producers receiving QLA Program payments are required to purchase crop insurance or NAP coverage for the next two available crop years at the 60% coverage level or higher. Wildlife and Hurricane Indemnity Program Plus (WHIP+) participants who already met the WHIP+ requirement to purchase crop insurance or NAP coverage are considered to have thereby met the requirement to purchase crop insurance or NAP coverage for QLA. If eligible, QLA participants may meet the insurance purchase requirement by purchasing Whole-Farm Revenue Protection coverage offered through USDA's Risk Management Agency.

AGRICULTURE RISK COVERAGE AND PRICE LOSS COVERAGE PROGRAMS FOR 2021

Agricultural producers can now make elections and enroll in the Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs for the 2021 crop year. The signup period opened Tuesday, Oct. 13. These key U.S.

Department of Agriculture (USDA) safety-net programs help producers weather fluctuations in either revenue or price for certain crops. Enrollment for the 2021 crop year closes March 15, 2021. Producers can elect coverage and enroll in crop-by-crop ARC-County or PLC, or ARC-Individual for the entire farm, for the 2021 crop year. Although election changes for 2021 are optional, enrollment (signed contract) is required for each year of the program. If a producer has a multi-year contract on the farm and makes an election change for 2021, it will be necessary to sign a new contract.

If an election is not submitted by the deadline of March 15, 2021, the election defaults to the current election for crops on the farm from the prior crop year.

For crop years 2022 and 2023, producers will have an opportunity to make new elections during those signups. Farm owners cannot enroll in either program unless they have a share interest in the farm.



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INGREDIENTS

- 4 cups Juneberries
- 1/3 cup sugar
- 2 tbsp. lemon juice
- 1/2 cup brown sugar
- 4 tbsp butter
- 1/3 cup flour
- 3/4 cup oatmeal

Directions

Preheat oven to 375 degrees. Lightly grease a 9 x9 pan. Mix together sugar, juneberries and lemon juice. In a small bowl combine brown sugar, butter, flour and oatmeal until crumbly. Spread half of the oatmeal mixture in the bottom of the pan. Add the Juneberry mixture. Cover with the remaining oatmeal mixture.

Bake 35-40 minutes.



Biodiversity on Rangelands: What Role Does Grazing Have?

Krista Ehlert

ASSISTANT PROFESSOR & SDSU EXTENSION RANGE SPECIALIST

<https://extension.sdstate.edu/biodiversity-rangelands-what-role-does-grazing-have>

WHAT IS BIODIVERSITY?

We often think of biodiversity in the context of animals, such as those that are threatened or endangered; however, biodiversity is equally important among plants, which are found throughout South Dakota and in particular, in our rangelands. Biodiversity is defined as the variability among living organisms, and quite simply can be thought of as “the spice of life.” It can exist at multiple spatial scales, which means we can talk about biodiversity at small scales (species) or extremely large scales (across an ecosystem or landscape). Biodiversity is not static and can vary over time. Without biodiversity, our ecosystems across the world would look and function very differently, including those found in South Dakota.

Why is biodiversity important?

Aesthetics, economics, and ecosystem services are some of the key reasons why biodiversity is important. Most people appreciate the look of a rangeland covered in perennial grasses such as Western wheatgrass that is scattered with purple coneflower, scarlet globemallow, spiderwort, and milkweed, to name a few. This heterogeneous mix of plant species creates visual interest and is great to enjoy during recreational pursuits such as hunting or hiking. At the same time, there are direct benefits to having a heterogeneous or multi-species mix of plants. Benefits include food and fiber production, and forage for grazing animals, which have tangible economic benefits. Less obvious, but equally important benefits include the functioning of key ecosystem services such as mitigating climate and moderating weather, soil creation and stabilization, nutrient cycling, and water storage and purification. Further, a diverse array of cover, nesting sites, and food sources allow for several species – and therefore, diversity – of wildlife to co-exist. Ultimately, biodiversity is important for ecosystems and should be included in things to consider in managing rangelands and has been recognized as such by the Society for Range Management.

How does grazing influence biodiversity?
Livestock producers have a direct role in maintaining and creating biodiversity in grassland ecosystems, by choosing when, where, and how long to graze. The relationship



between biodiversity and grazing is complex and has been evolving ever since grazing animals were on the landscape.

Grazing can create positive and negative effects on biodiversity. For example, continuous heavy grazing and trampling can result in rare plants being outplaced from a system. Indirect effects of heavy grazing can be felt by wide-ranging vertebrates, such as predators and carrion-eaters (i.e. scavengers), that are sometimes jeopardized by heavy grazing. In contrast, the short-grass steppe ecosystems that are the result of heavy grazing pressure provide the mountain plover with nesting habitat. Thus, livestock grazing can enhance the conservation of particular species.

Finding the balance between seeing grazing as the means to an end (livestock production) and a tool to increase the production, biodiversity, and resiliency of grassland systems requires some practice. Ranchers can alter the time, intensity, and duration of grazing, rest period length, and type of livestock to create different vegetation heights, and the kind and amount of plants. Moderate grazing and trampling, for example, can increase plant diversity by decreasing the ability of one species becoming dominant. In contrast, heavy grazing can shift native, perennial grass rangeland into range that is dominated by short-grass species such as

buffalograss and Kentucky bluegrass, as the heavy grazing pressure will have pushed out the more 'sensitive' native grasses like Western wheatgrass and allowed the more 'tough' and competitive shortgrasses to take over. At the same time, however, heavy grazing can be a tool to create biodiversity in other scenarios. If you have a pasture dominated by a cool season, introduced grass like smooth brome and you would like to increase the diversity of that pasture, you could graze that pasture heavy and early in the season to decrease its competitiveness and give native perennial species an edge. Grazing in this scenario will create gaps in the plant community, making light, moisture, and nutrients more available for species that emerge slightly later like Western Wheatgrass, helping them get established. Increasing rest periods can result in greater vegetation height but requires flexibility within your operation to accommodate this.

Why should you care about plant biodiversity?

We can dig deeper into why plant biodiversity is important by thinking of factory workers. In a car factory, for example, there are workers who do the engine installation, workers who put the hood on, workers who put the wheels on the car and so on. The big picture is this: the car is not made and cannot function without each of those workers doing their part. If the car ends up with only 3 wheels, it will not function the same as it would if it had all 4 wheels on. The car could maybe hobble down the road, but it won't get too much further than a block, and if it needs to change direction, it can't. The same can be said of grassland systems – without a multitude of individual plants, the

system will slowly move forward and then stop. With a variety of plants – grasses, forbs, and shrubs – the system can continually evolve and respond to change, such as drought or wildfire. Whether or not a system can respond to change is up to the driver's decisions; so, consider your management decisions as a producer in the grand scheme of your goals and see if there's room to use grazing as a tool to increase the production, biodiversity, and resiliency of your rangeland.

References:

- Society for Range Management. Biodiversity of rangelands: An issue paper. Hidinger L, editor. Denver (CO): Society for Range Management.
- Derner, J.D., D.J. Augustine, and E.J. Kachergis. 2014. Cattle as ecosystem engineers. Western Confluence: Natural Resource Science and Management in the West. Issue 01: 10-13.



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Stanley County Conservation District

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Using Native Plants to Revegetate Salt-Impacted Soils

by Abigail Blanchard and Lora Perkins

In the northern Great Plains, an estimated 26 million acres of land have salt-impacted soils. Salt-impacted soils occur when salts from underlying marine sediments move upward through the soil when soils are saturated and accumulate at the surface after the soil moisture evaporates. Once enough salt accumulates, many plant species cannot grow and seeds cannot germinate. Plants that are able to grow experience limited water uptake and high salt accumulation causing salt toxicity.

Traditional methods to remediate salt-impacted soil include installing tile drainage, applying gypsum, and leaching salts. However, these methods were developed in more arid areas with much more irrigation (such as the Southwestern U.S.). In our region, studies have shown that these methods can be ineffective at remediating salt-impacted soils and may even worsen the problem. Therefore, we are working on identifying native plant species suitable for revegetating salt-impacted soils. The hope is that growing native plants in salt-impacted areas will provide cover, decrease erosion, and start to reestablish soil health.

We examined the survival of eight species in salt-impacted soils on private cropland previously managed in a conventional corn/soybean rotation in Clark County, South Dakota. Four grass species (alkali sacaton, Canada wildrye, slender wheatgrass, and western wheatgrass) and four forb species (blanketflower, Maximilian sunflower, showy milkweed, and showy ticktrefoil) were grown in the greenhouse (March 2019) and planted in the field (June 2019). Species were chosen based on their germination ability in saline conditions. We planted 2,016 transplants (252 per species) into soil with high, medium, and low/no salt concentrations. Before planting, existing vegetation was mowed (where there was any vegetation) and Dewitt woven ground cover was used (see photo).

End-of-season sampling (October 2019) revealed that native grasses had greater survival than forbs in all salt concentrations. In general, grasses had significantly higher survival in low and medium salt concentrations than the high salt concentration, except alkali sacaton. Interestingly, alkali sacaton survival increased as salt concentration increased. In other words, alkali sacaton had greater survival in the high salt concentration than in the low salt concentration. Sadly, none of the forbs were alive at the end-of-season sampling in the high salt concentration. Blanketflower, Maximilian sunflower, and showy milkweed had surviving transplants in the low and medium salt while showy ticktrefoil only had surviving transplants in the low salt.

With these results, land managers and landowners can make a more informed decision on how to revegetate salt-impacted soils in the Northern Great Plains.



Alkali sacaton transplant growing in saline/sodic soil (Photo by Abigail Blanchard)/

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Hughes and Stanley County Conservation Districts will each be looking for dependable and reliable individuals to assist with the planting of trees and fabric applications this spring. Positions are available for tractor drivers, machine planters, fabric machine applicators and general laborers. Training is provided. Overtime and bonuses are available. Applications are available at the Hughes County Conservation District office located at 1717 N Lincoln Ave, Suite 103, Pierre, SD. or at the Pierre area Career Center.

Please feel free to call the following numbers for the respective Districts.

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605-280-3021 Doug, (Manager)**

Stanley County

**605-220-1840 Mary Beth, (Office)
605-220-2854 Matt, (Field Manager)**