



## Ducks Unlimited Promotes Cover Crops and Regenerative Agriculture

Over nine million acres of cropland are planted to corn and soybeans every year in the portion of eastern South Dakota considered to be a high priority landscape for waterfowl. Ducks are attracted to this landscape because it is filled with an abundance of small prairie pothole wetlands.

These extremely productive wetlands are rich with aquatic foods needed by breeding waterfowl and other wildlife. However, the native grasslands that most of these ducks would have naturally used as nesting cover have largely been converted to cropland primarily planted to corn and soybeans.

Ducks are programmed to establish nests in thick grasslands, not bare fields being planted to row crops. "Up until a couple years ago, you would have been laughed at by waterfowl biologists if you would have suggested ducks would nest in a soybean or corn field", observed Steve Donovan, DU's Manager of Conservation Programs in the state.

According to Donovan, corn and soybeans are typically planted into a recently tilled field and the resulting bare soil is not conducive to attract nesting ducks. However, something has happened in the last several years that appears to be challenging this long-standing assumption. The agricultural world is starting to embrace "regenerative agriculture" as a means to improve soil health.

The basic concepts of this new strategy include a reduction in tillage, planting more diverse crops and using cover crops. It is not uncommon now to see a farmer planting soybeans into knee high green cover crops. The cover crops protect his soil, reduce fertilizer costs, improve organic matter levels which will increase water storage capability and provide wildlife habitat, including grassland cover sufficient to attract ducks looking for a place to nest.

"It's exciting and definitely a game changer", according to DU's agronomist Brad Schmidt. "Farmers are adopting these practices because it improves their bottom line by reducing input costs while protecting yields and also provides long-term benefits to soil health", he added.

A research project partially funded by DU is looking at the benefits of cover crops to nesting birds, primarily waterfowl. Initial results are promising. Duck nests are being found in cover crops. "There remains a lot to learn about cover crops and nesting birds, but we are excited about the initial results", added Donovan, who firmly believes that the development of new and improved farming practices, including the use of precision planting equipment, will further improve nest success rates in cover crops by reducing the number of nests accidentally destroyed by planting equipment.

But potential nesting cover is not the only benefit that cover crops provide to ducks and other wildlife. Cover crops protect soil and reduce erosion, which means that fertilizers and other agricultural chemicals stay in the field where they belong, instead of being washed downstream into wetlands, streams, rivers and lakes. The "dead zone" in the Gulf of Mexico is largely caused by nutrients running off farmland in the Upper Mississippi River watershed. Applying regenerative farming principles can substantially reduce the loss of these nutrients from this landscape, dramatically improving downstream water quality. "It's an exciting development for agriculture in South Dakota and Ducks Unlimited is thrilled to help support this movement", added Schmidt.

DU's new "Soil Health Program" is providing cost share assistance for a variety of soil health practices, including cover crops. In the fall of 2018, DU provided financial assistance to producers who established over 5,000 acres of cover crops. Many of these producers had never tried cover crops before.

Donovan believes working with producers in the Prairie Pothole Region to promote regenerative agricultural practices will be a big part of DU's conservation program for decades to come. "Profitable and sustainable agriculture, and wetlands conservation, are not mutually exclusive", said Donovan. "We believe in profitable agriculture, vibrant local communities, protecting water quality and having abundant wildlife. It's a way of life that South Dakotans enjoy, and expect to enjoy long into the future."



**Regenerative agriculture just might be the answer to achieving these goals.**

