

## Fall Management of Crops for Waterfowl

By

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Fall has arrived, and for duck hunters, this is an exciting time of year. This is the time of year to plug drains and pump water or wait for abundant rainfall. It's the time of year to repair hunting blinds and camps, and to look over your inventory of hunting gear. After all, you worked hard and sweated through the spring and summer managing natural and/or planted waterfowl foods. By now, your habitat is as ready as it's going to be, so now it's time to sit and wait, right? Well, not if you plan to hunt agricultural fields.

A common misconception among duck hunters is that nothing can be done to enhance a harvested agricultural field for attracting ducks. In Mississippi, agricultural crops and other planted foods are vitally important pieces of the wetland landscape puzzle during winter. However, many farming practices have changed over the years, and have contributed to the decline in waterfowl foods left in fields during winter. For example, increased harvesting efficiency has reduced the amount of waste grains left in fields. In addition, new crop varieties are being planted and harvested earlier in the year, allowing waste grains more time to decompose before wintering waterfowl arrive in large numbers. Finally, disking fields after harvest to reduce crop residue for the following planting season is also a common practice that causes further decline in waste grain availability. When feasible, using some of the techniques discussed below will help save available waste grain for waterfowl, even in harvested production agriculture fields.

### **General Considerations**

One of the easiest ways to enhance a field for waterfowl is to leave strips of unharvested crops. Strips can be left in areas where crops did not produce well, or in areas where weeds are a problem (typically where ducks would feed anyway). These strips provide food for ducks, as well as cover for hunters. When leasing fields for hunting, a fee can often be negotiated for leaving certain amounts of standing crops.

Crop residue management practices may be the most important method to retain food for waterfowl. Disking and flooding harvested fields, although effective in reducing crop residue, generally buries much of the leftover grain too deep for ducks to efficiently find. Alternatives to disking crop stubble include burning, rolling, and mowing before flooding. These methods either directly decrease crop residue (burning and mowing) or help to incorporate it into the soil (rolling), which speeds decomposition when flooded.

### **Corn**

One of the most popular crops planted for waterfowl is corn. Corn contains high levels of carbohydrates, which ducks use to build quick supplies of winter energy, particularly in extremely cold temperatures. Harvested corn fields can be optimized for waterfowl by planning ahead of time. Leaving strips of unharvested corn in low-lying areas of fields can provide some cover for hunters, as well as boost food availability. Also, rolling or mowing corn stubble can create attractive landing zones and areas for decoy placement. Generally, harvested corn fields have natural grasses interspersed throughout, which add to the field's food diversity and abundance when fields are not disked in the fall. These same strategies can also be applied to milo fields.

### **Rice**

Rice is a very important crop for waterfowl, particularly in the Mississippi Delta. Similar to corn, rice is high in energy that can be readily used by ducks. Also, when flooded, rice decomposes much slower than other crops. However, since it is somewhat expensive and difficult to grow, rice is typically grown in production agriculture and intended for harvest. However, there are several methods to make harvested rice more attractive for waterfowl.

If feasible, leaving standing strips of unharvested rice for waterfowl can greatly increase the amount of food available for ducks. When leaving strips of rice is not possible, rice stubble can be modified to attract waterfowl after harvesting. After harvest, we recommend burning rice stubble with a head fire to remove some of the standing stubble and litter left from harvest. When flooded, this creates a patchy distribution of stubble and open water that is attractive to ducks. When a field cannot be burned, we recommend rolling patches of rice stubble after harvest. This also will create open areas where ducks can access the rice field. We do not recommend disking or mowing

harvested rice stubble, because research has shown these methods reduce both the amount of waste rice and the abundance of waterfowl using the field.

### **Soybeans**

Purely from an acreage standpoint, flooded soybeans are another important crop to Mississippi waterfowl. However, we do not recommend planting soybeans solely for waterfowl, because they rapidly deteriorate when flooded and provide relatively little food value for waterfowl. However, flooded soybeans can be managed effectively as part of a comprehensive waterfowl habitat management plan.

As with other crops, leaving strips of standing soybeans will increase the food availability in a field. When possible, soybean fields should be irrigated after harvest to promote the growth of natural vegetation like wild millet. Another way to increase the food value of an early-planted (April to June) soybean field is to broadcast Japanese millet over the field when the soybean leaves begin to turn brown. When the soybeans are harvested, the millet will begin to grow and put on a small seed head if given enough moisture and time before the first frost.

### **Flooding**

Varying the flooding schedule of agricultural fields can benefit both waterfowl and waterfowl hunters. In general, the flooded area should increase as waterfowl numbers increase. Entire fields should not be flooded at one time. When possible, fields should be gradually flooded, providing newly available grain as the winter progresses. Delaying flooding in some areas prevents grain from rapidly decomposing, reserving it for later in the winter. Developing a flooding schedule similar to the one below can help you maximize the food-providing potential of your agricultural fields.

October 15 – November 15: Slowly flood up to 25% of available fields.

November 15 – November 30: Have about 50% of fields (by area) flooded by the opening of duck season.

December 1 – December 15: Gradually flood fields to about 75% of capacity.

December 15 – January 15: Fill fields to 100% capacity.

January 15 – February 15: Maintain flooding at 100%.

February 15 – Forward: Begin a slow drawdown of all fields to concentrate invertebrates and other food resources. Some water should be maintained as late as possible to provide habitat for ducks as they build body reserves in preparation for spring migration.

### **Summary**

Planting crops for waterfowl can be an important part of an overall habitat management strategy, but remember crops cannot meet all the needs of wintering waterfowl. In fact, ducks may avoid these areas during certain times of the winter, particularly during early winter and during pair formation. Also, when preparing fields for waterfowl hunting, remember that **UNHARVESTED PLANTED CROPS** cannot be manipulated for waterfowl hunting. This means unless they are harvested; corn, rice, and soybean fields **cannot** be burned, rolled, mowed, disked, etc. Habitat selection is influenced by temperature, time of day, time of year, and many other factors; so pay attention to what ducks are doing throughout the winter. You may learn some valuable information that can make you a more successful waterfowl hunter. For more information or assistance on waterfowl habitat management, please contact us through our website at [www.mdwfp.com/waterfowl](http://www.mdwfp.com/waterfowl).