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Landowner Cooperatives

By John Hendrix, private lands biologist



The old saying "there is safety in numbers" is as true for landowners working to enhance wildlife populations as it is for bobwhite quail huddled in a circle during the night. Managing wildlife populations is very difficult on smaller acreages. Deer, turkey and other wildlife species will use several thousand acres to meet their habitat requirements throughout the year. While improving habitat on smaller acreages will provide benefits, landowners should keep in mind that they are just working on part of the habitat puzzle. The other pieces of the puzzle belong to neighbors and

Landowner Cooperatives can be an effective way of making them fit.

A turkey flock is a great example of a wildlife species that will use many habitat types over thousands of acres to maintain its population. During the winter, turkey flocks are in large groups usually near a food source such as agricultural plantings. In early spring the flock begins to break up into smaller groups traveling several miles to complete the breeding season ritual. Hens will seek out quality nesting cover, which may cause them to travel even farther away from the wintering area. During the summer months, turkeys mainly search out good areas for bugging and spend the rest of their time loafing during the heat of the day. Then about the time the first frost hits, the turkey flock gathers back into their winter flock, completing the annual cycle.

As you can see, the habitat requirements of a turkey flock can be substantial and likely include areas beyond your control. Do not be discouraged if you do not operate on a large acreage, there are still things you can do to manage wildlife populations. First, do not quit the habitat improvement project you are currently completing, because the work you are doing will help benefit your targeted species sometime during the year. Second, begin talking with your neighbors to see if you have some common interest or goals that can ben-

efit your targeted wildlife population.

Cooperatives can be formed for other natural resource concerns and wildlife. For example, cooperatives are formed for rangeland improvement, cedar control, noxious weed control, prescribed fire, and other management concerns that could require larger acreage. Some benefits received from a cooperative could be an increase in hunting lease incomes, increase in wildlife populations, rangeland improvements, decrease in operating expenses, and creating life-long friendships.

One of the most successful landowner cooperatives was established in southern Oklahoma with the guidance of Noble Foundation wildlife specialists. The cooperative was formed in 1996 to increase the quality of the white-tailed deer herd. The cooperative was started with five landowners with 8,100 acres. After five years, the cooperative has grown to 13 landowners covering a total of 12,608 acres.

What does it take to maintain and have an active cooperative. The cooperative can be very loosely managed- meeting one time each year, or it can be intensely managed with elected board members and monthly meetings. Communication, common goals, cooperation, and shared work loads are some of the qualities that will help maintain your landowner cooperative.

Landowner cooperatives are not a new concept in landscape management. This process has been very effective in the eastern states for many years. Oklahoma landowners should begin to look at this option to help them achieve their goals more effectively.

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Oklahoma Department of Wildlife Conservation Mission

Statement: Managing Oklahoma's wildlife resources and habitat to provide scientific, educational, aesthetic, economic and recreational benefits for present and future generations of hunters, anglers and others who appreciate wildlife.

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Food Plots

By Mike Sams, upland game biologist

Not much stirs up more controversy among wildlife biologists than the topic of food plots and the proverbial question of "What should I plant for wildlife?" It seems as if there is a common misconception that managing habitat for wildlife requires food plantings. To the contrary, good wildlife management does not require food plantings and likewise food plantings alone are not indicative of good wildlife management.

Food plots have specific applications and are justifiable if these applications meet your objectives. In general, food plots can be tailored for two basic objectives: 1) attracting animals to an area, and 2) increasing habitat productivity. Both uses are distinct in their management requirements and probabilities of success.

The simple fact of the matter is that wildlife utilize food plots and not being one to pass up on a cheap buffet, I can appreciate their attractiveness. Attracting animals to an area is the most functional and reliable application of food plots. Plantings of choice foods serves to concentrate animal movement within an area increasing the likelihood of sightings and harvesting success. However, all too often this concentration of animals is often misconceived as an increase in population density resulting in the unjust



A well-managed cow pea food plot may increase the deer activity on your property..

praise of food plots.

Increasing habitat productivity using food plots is intended to increase animal production (numbers and/or stature) above what the habitat can naturally support. While it seems perfectly logical that more food equals more game, science has yet to prove the ability of food plots alone to increase wildlife populations, suggesting it is a risky practice at best. When the goal is to increase habitat productivity one must take into consideration all aspects of an animal's habitat requirements (food, cover, water and space).

For instance, a property with just enough cover to support two coveys of quail will never have more than two coveys no matter how much food you supply them with.

Plantings aimed at increasing habitat productivity must increase food availability, diversity, and nutritional quality during

Food Plots continued on pg 7

Planting Considerations

- * Tilled seedbeds result in higher productivity and success.
- * Conduct a soil test; it can save you in the long run.
- * Fertilize to ensure maximum forage productivity.
- * Visit with your local seed dealers to see what forage varieties work best in your area.
- * Planting two or more crops can provide forage over a longer period of time and increase the plot's attractiveness to wildlife.
- * When planting combinations of forage, fertilize according to legume requirements.
- * Make sure legume seeds are inoculated.
- * Always fence livestock out of food plots.
- * Do not plant food plots near roads.

Feral Hogs

“What to Know Regarding The Law”

By Dennis Maxwell, assistant chief of law enforcement

The Wildlife Department receives many inquiries each year about hunting “wild hogs.” Wild or feral hogs have normally been associated with southeastern Oklahoma. But these critters have been encroaching into other areas and are now found statewide. Feral hogs are not considered wildlife in Oklahoma. According to state law, feral hogs are defined as feral five days after escaping confinement. If notice is provided to adjacent landowners within those five days, the hog shall not be considered feral for an additional 10 days.

Feral hogs may be hunted or trapped year-round during daylight hours, with the landowner’s permission. If a person wants to hunt feral hogs on private land he/she is not required to have any kind of hunting or trapping license. However, persons hunting feral hogs during any of the big game seasons, (such as primitive, modern gun, special antlerless deer and elk season), they will need to possess a filled or unfilled deer, or elk license for that season. They will also need to comply with all other deer regulations, such as wearing blaze orange clothing. If a person wants to hunt hogs on any of the Oklahoma Department of Wildlife Conservation’s Management Areas (WMA’s) with a



firearm or archery equipment he/she will need to have a hunting license unless he/she is exempt.

It is permissible for landowners to make money charging people to hunt feral hogs, as long as the hogs are already on their land. However, according to state law, no person shall release any hog to live in a feral state on either private or public land.

Feral hogs do a lot of damage to crops, native wildlife, habitat and to the land in general, so releasing them into the wild would be a mistake.

If a landowner wants to get rid of feral hogs on his/her land after they are established, it will be very hard to do. The most effective time to control feral hogs is when they first appear in the area. One of the better methods to control feral hogs is by trapping. Cage traps are probably the most effective way to trap feral hogs, and there are several different cage traps that have proven effectiveness. Plans for traps can be obtained from the Noble Foundation and the Oklahoma Department of Agriculture.

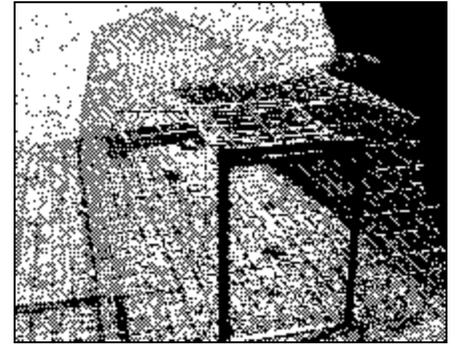
If a landowner has severe crop depredation from feral hogs and has tried multiple means to eradicate the hogs, they can contact their local game warden or area biologist to apply for a Feral Hog Depredation permit. This permit will allow a landowner to harvest hogs at night, which may increase their success rate.

photos courtesy of The Noble Foundation



Feral hogs may be hunted or trapped year-round, except at night, with the landowner’s permission. A person does not need a hunting or trapping license if they are on private land. But, if hunting during any of the big game hunting seasons, that person must possess a filled or unfilled license for that particular season.

One of the best methods to control feral hogs is by trapping. Some examples of hog traps are shown here.



Your Side of the Fence

is produced three times a year and is now on-line.

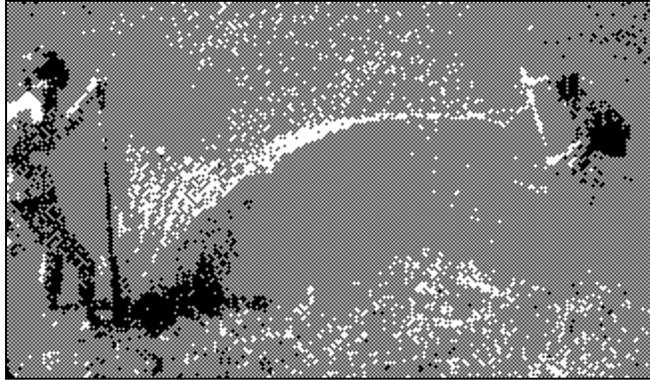
Every issue is available by logging onto the Oklahoma Department of Wildlife Conservation’s Web site:

www.wildlifedepartment.com

How to Assess the Fish in Your Farm Pond

By David Routledge, southeast region fisheries technician

Summer is just around the corner and I am sure many farm pond owners, if they haven't done so already, will be dusting off their fishing equipment and heading to their very own body of water for some angling action. Many of you will probably be wondering if you have a quality fishery in your pond or if some adjustments need to be made to improve the existing population.



Shoreline seining will help you determine the reproductive success of largemouth bass and bluegill in your pond. For best results, use a 20 x 4 foot minnow seine with one-quarter inch mesh, from June through September.

Yes, there are ways to evaluate the fisheries population in your farm pond and early summer is an excellent time to do so. There are two main methods to assess your pond's fish population. One is to seine the shoreline which would cool you off when the weather heats up, and the drier method would be to fish your pond and monitor what you catch.

Assessment Methods

Let's start with the shoreline seining technique, which will help you determine the reproductive success of largemouth bass and bluegill in your pond. Shoreline seining of your pond is best accomplished from June to September. For best results

use a 20 X 4 foot minnow seine with one-quarter inch mesh. Several quadrant hauls should be made in different locations, while at the same time trying to avoid areas with excessive vegetation and brush. Once a haul has been made, you should record the numbers and lengths of all fish sampled. This method should also be supplemented by angler catch records. Your seine haul should contain several fry and fewer intermediate sized bluegill (two-three inches) and a few bass fingerlings (one-three inches).

Angling is the second method of assessing fish in your pond which sounds like great fun, but it also requires a lot of work on your part. This assessment technique provides information on adult species in your pond. You should fish your pond on a regular basis

throughout the year with a variety of lures and baits such as bass lures, worms, crickets, doughbaits and crappie jigs. This will allow you to catch various sizes and types of fish.

For this method of assessing your pond to be effective, you should record the lengths and numbers of each species caught on a yearly basis. A yearly record of fish caught will provide a trend in the harvest make-up, which in turn will allow you to make sound management decisions. Also, if you have friends that frequently fish your pond, you should make sure they keep a record of all the fish they catch as well. You should also keep track of the time you fished so you can determine the catch rate of all species caught. For a fishing log to record your catch, refer to the 2001 summer issue of *Your Side of the Fence*, "Getting to Know Your Pond" by Brent Gordon on page 7. Past issues of *Your Side of the Fence* can be obtained at the Department web site <http://www.wildlifedepartment.com>. Go to publications, then Landowner Newsletter.

Interpreting Your Assessment

Now that you have completed the hard work, or should I say fun of assessing what is in your pond, it is time to interpret your findings. If you found an abundant rough fish population such as carp, bullheads, gar, etc. your best bet would be to renovate your pond by lowering the water level and applying a fish toxin called rotenone. This will kill out all the fish, then you can restock the pond with bluegill, largemouth bass and catfish. It is illegal to apply rotenone in Oklahoma bodies of water without ODWC supervision and approval, so make sure you contact your local ODWC personnel for advice if you go this route.

If you used the shoreline seining technique and found mainly bass, bluegill and catfish, use Table 1 to evaluate the population.

If angler harvest methods were used to evaluate the bass

TABLE ONE

SEINE CONTENTS	STATUS	RECOMMENDATION
- Young bass (<4 inches) - Many recently hatched bluegill (<2 inches)	Population balance	Continue assessment using angler harvest records
- Young bass (<4 inches) - No recently hatched bluegill	Bluegill absent or undesirable species competing with bluegills	Verify bluegill presence by angling
- No young bass - Many recently hatched bluegill (<2 inches)	Bluegill crowded or bass not present in pond	Verify bass presence by angling
- No young bass - No recently hatched bluegills - Undesirable species collected	Over population or absence of bluegills or undesirable fish species overpopulation	Verify bass and/or bluegill presence by angling



The drier method of sampling a farm pond is to use a rod and reel.

and bluegill populations in your pond, then recommendations can be made on abundance and size distribution of the two species and Percentage Size Distribution (PSD) values.

To maintain a balanced fish population, you should try to keep PSD values for bass and bluegill in the desired range and follow harvest recommendations in Table 2.

Other Important Pond Management Considerations

One mistake many people make which can have a detrimental effect on a pond's fish population is not harvesting any fish. It is very important to harvest fish out of your pond to keep it in good balance. A good rule of thumb is to harvest one pound of bass for every four to five pounds

of bluegill harvested. Yes, you need to harvest both bass and bluegill.

Also, many pond owners think it would be desirable to have crappie in their pond. This is a mistake, since crappie are notorious for producing large year classes. If there are not sufficient numbers of bass to help control the crappie, then they can become overpopulated and stunted. The result could be a poor balance of all species in your pond.

Conclusion

By assessing your farm pond's fish population on a regular basis and applying sound management practices, you should enjoy years of quality fishing on your very own body of water. For more detailed information on managing your pond, I recommend reading the ODWC publication "Managing Pond Fisheries in Oklahoma". This can be obtained from all Wildlife Department installations for \$3. You can also go to the Department web site <http://www.wildlifedepartment.com/outstore.htm>; print an order form and send it along with \$3 to Oklahoma Department of Wildlife Conservation, C/O License section, P.O. Box 53465, Oklahoma City, OK 73105.

Much of the information obtained in this article came from "Managing Pond Fisheries in Oklahoma" and "Stocking and Management Recommendations For Texas Farm Ponds".

Listed below are two examples of how to figure PSD values for bass and bluegill in your pond

Bass PSD example

Your catch record shows 100 total bass caught with 45 being over 12 inches long.

$$\frac{45 \text{ (Bass > 12 inches)} \times 100}{100 \text{ (total bass)}} = 45\%$$

Bluegill PSD example

Your catch record indicates 60 total bluegill caught with 30 being over 6 inches

$$\frac{30 \text{ (Bluegill > 6 inches)} \times 100}{60 \text{ (total bluegill)}} = 50\%$$

TABLE TWO

CATCH COMPOSITION	ANGLING PSD %		HARVEST RECOMMENDATIONS
	BASS	BLUEGILL	
- Bass average 12" - 15" - Bluegill range from 3" -6" or larger	20 - 60	50 - 80	Balanced pond - release 12 " - 15 " bass
- Bass caught are 12 "or larger - Bluegill caught are less than 5"	20 - 60	less than 50	Bluegill reaching over-crowded conditions. Harvest more bluegill and release 12" - 15" bass
- Bass average 12" - 15 " - Bluegill caught are less than 5 "	greater than 60	less than 50	Bluegill overcrowded. Harvest more bluegill and release all bass.
- Bass easy to catch and most are less than 12 " - Bluegill range from 3 " to 6 " or larger	less than 20	50 - 80	Bass reaching over crowded conditions. Harvest more bass less than 12". Release 12" - 15" bass.
- Bass easy to catch and most are less than 12 " - Bluegill (6" plus) frequent	less than 20	greater than 80	Bass over crowded. Harvest more bass less than 12" and over 15". Release 12"-15" bass and all bluegill.
- Undesirable species caught (carp, bullhead, gar, etc.)			Consider renovation

What does it take to create and maintain an active cooperative?

- * Develop a friendly working relationship with your neighbors.
- * Determine common goals and interest as your neighbors.
- * Set up a meeting with willing landowners who are interested in a cooperative.
- * Determine how extensively you want the cooperative to get (meeting once a year or each month, board members, rules, etc).
- * Develop a strong communication network with your neighbors.
- * Sharing work loads after the cooperative is formed is very important.
- * Keep up with potential funding resources available through conservation grants and farm bill programs for the cooperative's property management options.
- * Share your accomplishments and failures with the cooperative members.

Landowner Cooperatives *continued from pg 1*

ly. For more information on landowner cooperatives contact Russell Stevens, Mike Porter, or Grant Huggins (wildlife specialists) at the Noble Foundation in Ardmore, Oklahoma at 580/223-5810, web site www.noble.org or contact John Hendrix, ODWC Private Lands Biologist at 405/880-0994.

Management Measures

May

Wildlife Habitat

- Monitor / fluctuate water levels in wetland areas.
- Monitor tree and shrub plantings.

Ponds

- Install catfish spawning containers (1-2 acres)
- Stock new ponds with fingerling largemouth bass

June

Wildlife Habitat

- Monitor / fluctuate water levels in wetland areas.
- Leave some unharvested winter crops next to field edges.
- Before mowing, walk out hay meadows to reduce wildlife mortality, and consider leaving unmowed strips

Ponds

- Spray willows and other woody vegetation.
- Pull catfish spawning containers.

July

Wildlife Habitat

- Monitor / fluctuate water levels in wetland areas.
- Monitor grazing program to provide nesting cover and plant diversity.
- Complete wetland dike repairs as needed.
- Before mowing, walk out hay meadows to reduce wildlife mortality, and consider leaving unmowed strips.
- Monitor tree and shrub plantings.

Ponds

- Seed exposed shoreline to Japanese millet.

August

Wildlife Habitat

- Monitor grazing program to provide nesting cover
- Spotlight count survey should be conducted as required for the DMAP program.
- Prepare ground for winter food plots.
- Complete wetland dike repair.
- Before mowing, walk out hay meadows to reduce wildlife mortality, and consider leaving unmowed strips.

Ponds

- Seed bare spots on shoreline with rye.

periods which quantity and/or quality of natural foods are deficient. This endeavor is risky because as Dale Rollins of Texas A&M says, "When you need 'em you can't grow 'em and when you can grow 'em you don't need 'em." While the past few summers have been brutally dry and deer have struggled to maintain condition, food plots likely would have not supplied any relief because the dry conditions prevented them from growing.

The amount of plantings needed to elicit changes in wildlife populations limits their use for many landowners. Some suggest that increasing habitat productivity for

deer with food plantings requires no less than three percent of the habitat to be planted to both warm and cool season forages. That's 60 acres of food plantings for every 1,000 acres of habitat. Plantings of this scale require substantial labor and financial investment and with outcomes that are marginal at best.

Manipulating native vegetation through proper grazing, prescribed burning, timber cutting, disking and fertilization are less expensive practices that have a longer life expectancy. When these manipulations are used to alter structural features (cover and edge) and food production in accordance with the requirements of a specific animal, your land will have a greater influence on population characteristics than



Food plots may help to increase deer harvest opportunities

* Excerpts were taken from: *Arkansas Food Plot Manual*, Arkansas Forest Resource Center, Mike Sams, Dave Peitz and Philip Tappe.

White-tailed Deer – Food plots can be effective at attracting animals for increased sightings and harvest opportunities. Attempts to increase habitat productivity require both warm and cool-season plantings to supplement periods of low availability and nutritional quality of natural forages (late summer and winter through early spring). Plot size varies with the forage planted, local deer numbers, and the crops attractiveness, but generally range from 1/2 – five acres in size. Plots are best if irregular or long and narrow in shape being no wider than 100 yards.

Wild Turkey – Food plots can serve to attract birds but their ability to increase populations of wild turkey is unknown. Cool season plantings are often used in western Oklahoma to hold turkeys to an area and can supplement turkey during times natural foods may be scarce (late winter through early spring). Because of their structure (bare ground) and the insects they attract warm season plantings may provide valuable brood rearing habitat. Plots are commonly used by gobblers as strutting zones. Plot design is similar to that of deer.

Bobwhite Quail – Food plots are commonly used to attract and concentrate birds for harvest. Food plots can serve as an emergency food source during times of extended snow/ice coverage provided seeds remain in heads above the snow/ice. Aside from providing emergency food during times of extended snow coverage, food plots alone have not been associated with increases in quail populations. Because they typically provide overhead canopy and bare ground, warm-season plantings can provide excellent brood rearing habitat. Food plots intended for quail must be located within 50 yards of escape cover (plum thickets, briars, brush piles, etc.). For intense quail management, one 1/2 to one acre food plot for every 15 – 30 acres of quail habitat is generally recommended.

White-tailed Deer

Cool Season

- Wheat
- Rye grass
- Oats
- Alfalfa
- White clover
- Crimson clover
- Austrian winter peas
- Vetch

Warm Season

- Cow peas
- Soybeans
- Milo
- Alyceclover
- Annual lespedeza

Wild Turkey

Cool Season

- Wheat
- Rye grass
- Oats
- Alfalfa
- Clovers

Warm Season

- Chufa
- Milo
- Alfalfa
- Corn
- Soybeans
- Annual Lespedeza

Bobwhite Quail

Cool Season

- Clovers

Warm Season

- Sunflowers
- Milo
- Browntop millet
- Proso millet
- Soybeans
- Annual Lespedeza