



Calendar for Land and Pond Management Practices

EXTENSION

December 2020

Dwayne Elmore
Extension Wildlife Specialist

Marley Beem
Associate Aquaculture Extension Specialist

John Weir
Associate Prescribed Fire Extension Specialist

Land Management is a yearlong activity. This calendar is intended to give guidance and act as reminder about specific fish and wildlife management activities in Oklahoma that might be relevant to your objectives. The specific activities that are applicable will depend on your objectives, resources and land type. Many of the listed activities have links for additional resources that can provide more information. Additionally, the local county OSU Extension office; USDA Natural Resource Conservation Service office; the Oklahoma Department of Wildlife Conservation, Oklahoma Forestry Services; and private conservation organizations can all provide technical assistance to help meet your land management goals. If you do not already have a management plan, consider starting one now and annually revise it as needed.

January

Forest thinning with herbicides – Hack and spray, girdle and spray, basal bark and cut stump are effective herbicide application techniques to thin forests. Depending on how it is carried out, selectively thinning trees can improve the habitat for many species of wildlife, increase growth of merchantable timber, and increase cattle forage. These techniques can be used any time of the year except during the spring sap-flow period of late February through early May because they are less effective during this time.

Prepare bird nest boxes – Many cavity nesting birds such as eastern bluebirds, purple martins and wood ducks start nesting in late winter. Clean out bird boxes, replace shavings and check predator guards before February to allow these boxes to be used. extension.okstate.edu/fact-sheets/landscaping-and-gardening-for-birds.html

Strip disking for forbs – Dormant season (November-February) strip disking can be used to increase desirable forbs (broadleaved non-woody plants) to benefit dove, quail, wild turkey, deer and pheasant. Sunflowers, croton (dove weed) and ragweed generally respond well to disking. Disking during the summer often increases undesirable plants. Disking is most appropriate on previously cultivated land or in deep sandy soil. Make sure to maintain grass and shrub cover around disked strips for maximum wildlife use.

Conduct dormant season burns – Conduct dormant season burns. Delaying until late winter or early spring risks

Oklahoma Cooperative Extension Fact Sheets are also available on our website at: extension.okstate.edu

not completing planned burns due to weather. Having a longer burn season will allow for more burns to be conducted and more acres to be burned each year. extension.okstate.edu/fact-sheets/the-best-time-of-year-to-conduct-prescribed-burns.html

February

Targeted trapping of nest predators – Targeted predator trapping just prior to nesting season (e.g. wild turkey and other ground nesting birds) may be appropriate in some situations when nest success is a limiting factor. Trapping can temporarily reduce the local numbers of raccoons, opossums and skunks. Consult with a wildlife biologist to see if trapping will help meet your objectives.

Conduct deer browse surveys – Deer browse surveys help determine if winter food resources are limited for deer. They should be conducted at the end of the winter just prior to spring green-up. If browse is limited, both habitat management and herd reduction may be needed. extension.okstate.edu/fact-sheets/white-tailed-deer-habitat-evaluation-and-management-guide.html

Drain water from seasonally flooded forests – Standing water in forested wetlands are great places to hunt waterfowl.



Selective removal of trees can be a useful practice to improve wildlife habitat, increase growth of remaining trees, and enhance cattle forage.

However, water should be removed from oak, hickory, sycamore and ash forests before the trees break dormancy in early spring or tree stress and mortality can occur. Bald cypress can grow in permanently flooded wetlands.

Remove unnecessary fence – A loose fence can be a wildlife death trap. Removing old fence that is not needed and repairing existing fence is a good practice to prevent wildlife entrapment. extension.okstate.edu/fact-sheets/minimizing-impacts-to-wildlife-from-livestock-infrastructure.html

March

Cut eastern redcedar – Eastern redcedar can be cut or mulched any time of the year. While March is a great time to do this, be careful with sparks as conditions are often favorable for wildfire during this time. Consider sinking a few of the cut redcedar in your pond as a fish attractor: Drill a hole in the base of three medium-sized redcedars and attach a cable and cinderblock. Do not sink in spots deeper than 8 feet. extension.okstate.edu/fact-sheets/eastern-redcedar-control-and-management-best-management-practices-to-restore-oklahomas-ecosystems.html

Conduct soil test for summer food plots – Summer food plots may need soil amendments. Check soil fertility while there is still time to make adjustments. Remember — if lime is needed to correct pH, it takes many weeks for the lime to work. Contact the local county extension office for assistance. extension.okstate.edu/county/index.html

Cease feeding grain to wildlife – As temperatures warm, risk of aflatoxin to wildlife increases. This toxin is readily produced by bacteria on grain (especially corn) during warm moist weather. Protein supplement may be continued if needed. extension.okstate.edu/fact-sheets/aflatoxins-in-wildlife-feed-know-how-to-protect-wildlife.html

Do not add bass or bluegill fingerlings to ponds – Fingerlings are quickly eaten by older bass. Improve your bass and bluegill fishing by removing overabundant (thin fish) size classes. You can stock 10-inch channel catfish - replacing the number harvested since the last time channel catfish were stocked. extension.okstate.edu/fact-sheets/improve-fishing-in-your-pond.html



Removing overabundant size classes of fish from your pond is a good practice. Some fish species such as green sunfish are not recommended for small ponds as they tend to become far too numerous.

April

Begin drawdown of non-forested wetlands – Holding water on wetlands (non-forested wetlands) until spring benefits waterfowl migrating North. Also, as wetlands become shallow, migrating shorebirds will use them. Many desirable forbs for waterfowl, such as smartweed, germinate in early spring as the ground dries.

Spray fescue – Tall fescue, a cool-season grass, is actively growing in early spring, but native warm-season grasses usually do not start growing until May. Herbicide applications now can help remove fescue and retain most native warm-season grasses and forbs. Glyphosate works well to control fescue.

Spray cool season annual weeds – Problem plants such as vetch can be invasive in food plots and in other disturbed areas. If needed, control before they set seed. Contact the local county OSU Extension office for assistance. extension.okstate.edu/county/index.html

Monitor nest boxes – Some wood ducks have already nested and nest boxes can be cleaned and set up for another nest attempt in April and May.

Pond weeds – If pond plants were overabundant last year, collect a sample and get the problem plant identified now. Visit with the county OSU Extension Educator about management options. Springtime management of pond plants is safer, easier and cheaper than later in the year. extension.okstate.edu/fact-sheets/aquatic-herbicides-essential-information-for-new-applicators.html

May

Plant summer food plots – Soil temperatures warm enough in May to allow summer food plot plants including corn, grain sorghum, millet, sunflower and soybeans to germinate. While food plots can be a part of a wildlife management plan and increase hunting success, be sure you are not neglecting habitat management. extension.okstate.edu/fact-sheets/a-practical-guide-to-food-plots-in-the-southern-great-plains.html

Conduct soil test for fall food plots – If no soil test has been conducted within the past couple of years and you plan to plant a food plot in August, now is the time to check soil fertility. The local county OSU Extension educator can help. extension.okstate.edu/county/index.html

Whistle counts for bobwhite – Spring whistle counts can be conducted in May and June to provide an annual index of male bobwhite. Choose sunny calm mornings to listen. extension.okstate.edu/fact-sheets/bobwhite-quail-habitat-evaluation-and-management-guide.html

Plan growing season burns – Begin planning your growing season burns and finishing firebreaks. extension.okstate.edu/fact-sheets/burn-plan-for-prescribed-burning.html

Control Bermudagrass (if part of your goals) – While Bermudagrass is an excellent cattle forage, it provides limited forage or cover for wildlife. In May and June, spray glyphosate to kill Bermudagrass when converting those areas to native plants. Multiple herbicide applications over at least two summers will be needed.

Dam and spillway check – Eroded or bare soil on dams or spillways should be sprigged or seeded with grass. Be alert for any beaver activity to prevent them from forming burrows in the dam. Check the outside toe of the spillway for erosion after any overflow – repair and revegetate immediately. extension.okstate.edu/county/index.html

okstate.edu/fact-sheets/keep-your-pond-in-good-condition.html

Burn brush piles – May and June are the safest time of year to burn brush piles. Watch the weather, mow around piles to reduce fuel loads, have adequate equipment on site and notify local fire department before burning. extension.okstate.edu/fact-sheets/managing-brush-piles.html

June

Spray summer weeds – Many problem plants start to become apparent during June. Nonnative plants such as Johnsongrass, Bermudagrass, sericea and perilla mint can be controlled during early summer. This also is a good time to control unwanted brush invading prairies. Scout now and spray when the plants are actively growing and most vulnerable. extension.okstate.edu/fact-sheets/weed-control-on-rangelands.html

Delay haying – Many producers start cutting native hay in June. Waiting until early July is not only better for wildlife, but also is better for hay quality and quantity. extension.okstate.edu/fact-sheets/reducing-mortality-of-grassland-wildlife-during-haying-and-wheat-harvesting-operations.html

Japanese millet for waterfowl – Japanese millet can be top seeded during June and July in drained waterfowl impoundments if adequate native food resources are insufficient. This plant matures quickly and provides abundant seed for waterfowl. Once established, it will often reseed each year.

Maintain turkey roosts – Turkeys prefer to roost in large trees with flat branches that lack brush in the understory. Clear shrubs and midstory trees (especially redcedar and saltcedar) from the understory to maintain traditional roost sites. extension.okstate.edu/fact-sheets/ecology-and-management-of-the-rio-grande-wild-turkey-in-oklahoma.html

Inspect pond edges – Walk shoreline and dam faces and look closely for signs of livestock hoof damage or anything unusual. Look for slumping, wave erosion or sediment accumulation from watershed erosion - shallow edges can be taken over by cattails. extension.okstate.edu/fact-sheets/keep-your-pond-in-good-condition.html



Roosting trees for wild turkey need to have an open understory. Brush such as eastern redcedar and saltcedar should be cleared to ensure long-term use by wild turkey flocks.

July

Conduct summer burns (July-September) – Nesting season is winding down for most ground-nesting birds. Deer fawns and reptiles are now highly mobile. July through September is a good time to conduct summer burns, especially in open grasslands and shrublands. extension.okstate.edu/fact-sheets/burning-in-the-growing-season.html

Burn Old World bluestem – Old World bluestems (OWB) are invasive grasses that can outcompete native prairie grasses. Burning during the summer months kills many (OWB) plants and can be used to reduce its dominance.

Cut native hayfields – Cutting hay in early July optimizes hay quantity and quality. Native hay fields should only be cut once per year and leave at least 4 inches of stubble to avoid damaging the grass. extension.okstate.edu/fact-sheets/native-hay-meadow-management.html

Monitor summer food plots – Control weeds in summer food plots, if needed. Top-dress nitrogen if plants show stress from deficiency. Contact the local county OSU Extension office for assistance. extension.okstate.edu/county/index.html

Monitor bass and bluegill population “balance” by inspecting your catch – If any size groups of fish are numerous and thin (poor body condition), harvesting more to reduce their numbers is recommended. Never transfer new fish into the pond unless advised to do so by a biologist. extension.okstate.edu/fact-sheets/improve-fishing-in-your-pond.html

August

Manipulate dove fields – Start manipulating dove fields in early August to attract dove for the September dove season. Mowing, disking, burning or grazing can all be used depending on the crop. extension.okstate.edu/fact-sheets/dove-field-management.html

Plant fall food plots – Fall food plots including wheat, oats, rye, chicory and turnips all can be planted starting in late August. extension.okstate.edu/fact-sheets/a-practical-guide-to-food-plots-in-the-southern-great-plains.html

Check water control structures – Make sure water control structures in wetlands are in working order and not clogged by beaver damage. If beavers are a problem, contact the Natural Resource Conservation Service for beaver exclusion device designs. farmers.gov/service-center-locator

Clear vegetation from pond and wetland dams – Trees and shrubs should not be allowed to establish on dams because woody roots lead to leakage and eventual dam failure. Remove them annually to keep dams strong. Grasses are excellent for preventing surface erosion on dams and spillways. extension.okstate.edu/fact-sheets/keep-your-pond-in-good-condition.html

Monitor pond water turbidity – Beware of overly green water. Check how many inches of water depth are needed before a white object disappears. If less than 12 inches, a fish kill is likely as microscopic plants die and decay, using oxygen. If less than 18 inches, there is still a chance of a fish kill. Work to reduce chemical fertilizer or animal manure runoff into the pond. extension.okstate.edu/fact-sheets/neighborhood-and-urban-pond-management.html

September

Conduct burns to increase forbs – While prescribed fire can be used almost any time of the year in Oklahoma, late summer/early fall burns often increase the number of forbs the following year. In areas lacking forbs, this can be a good strategy. However, only burn a portion of your property during this time to ensure wildlife and insects have cover during the fall and winter. extension.okstate.edu/fact-sheets/burning-in-the-growing-season.html

Spray sericea – Sericea is often sprayed in early summer with triclopyr. This is effective in areas dominated by sericea, but is detrimental to native forbs, if present. Waiting to spray until September (once sericea starts blooming) is not only effective for sericea control, but it kills fewer desirable native forbs. Metsulfuon-methyl is the herbicide of choice during the sericea bloom period. Contact the local county OSU Extension office for assistance. extension.okstate.edu/county/index.html

Use caution if feeding wildlife grain – Grain can contain aflatoxin, which is harmful to wildlife. Only buy USDA certified grain that is aflatoxin free. Keep the grain dry, do not pile it on the ground and only feed in the cool, dry months of the year. extension.okstate.edu/fact-sheets/aflatoxins-in-wildlife-feed-know-how-to-protect-wildlife.html

Escape ramps for wildlife – All cattle water tanks should have wildlife escape ramps installed. Not only does this prevent needless wildlife drowning, but it keeps the water clean for livestock. Check escape ramps at least once per year to ensure they are functioning. extension.okstate.edu/fact-sheets/minimizing-impacts-to-wildlife-from-livestock-infrastructure.html

October

Conduct fall covey counts for bobwhite – If you wish to determine the number of bobwhite coveys on your property, October is the month. During this time, coveys most reliably call at first light on clear calm mornings. extension.okstate.edu/fact-sheets/bobwhite-quail-habitat-evaluation-and-management-guide.html

Spray fescue – Spring and fall are the time to control this invasive grass that often invades native grasslands. Waiting



Install and maintain escape ramps in cattle water tanks. Not only does this prevent wildlife from drowning, but it will help keep livestock water clean.

until late October will ensure most native warm season grass is dormant so the herbicide (glyphosate) only targets the cool season fescue. Two applications (spring and fall) may be needed to adequately remove fescue.

Begin filling wetlands for waterfowl – Start flooding wetlands for waterfowl, which start arriving in October. However, greentree reservoirs (forested wetlands) should only be flooded after the trees enter dormancy in November.

Monitor acorn production – If you plan to thin oak forests, now is a good time to check acorn production. Individual trees vary in acorn production, and trees that are reliable producers can be marked to retain.

Delay tillage – After harvesting summer crops, delay tillage as long as feasible. This allows wildlife to use crop fields for food and cover throughout the fall and winter. While this practice helps many species of wildlife, pheasant in particular will benefit. extension.okstate.edu/fact-sheets/the-ring-necked-pheasant-in-oklahoma.html

Burn planning for dormant season burns – Begin planning for dormant season burns by selecting burn units, writing burn plans, preparing firebreaks and other needed activities. extension.okstate.edu/fact-sheets/burn-plan-for-prescribed-burning.html

Prepare for wild fire season - Make sure excess fuels are removed around homes, barns, equipment, deer blinds, etc. Now is the time to prepare, not when a wildfire is approaching. extension.okstate.edu/fact-sheets/wildfire-preparing-the-ranch-and-farm.html

November

Plant native prairie seeds – Prairie restoration or establishment of wildflower gardens benefits many animals, including important insects such as monarch. Late fall is a good time to plant. Contact the local county OSU Extension office for assistance. extension.okstate.edu/county/index.html

Collect deer harvest data – Keep a lower jaw from each deer harvested to determine age of deer and record dressed weight as an index of food availability. Also, record number of deer seen during each hunt and estimated age of observed bucks. This data will help determine if you are meeting management goals. extension.okstate.edu/fact-sheets/quality-deer-management-in-oklahoma.html

Collect wing from each harvested quail – Quail can be aged by their wing characteristics. This gives an index of annual production. Contact a local wildlife biologist to learn more. In good hunting years, up to 80% of the quail are produced the previous summer. Also, examine crop contents of quail to see what they have been eating. extension.okstate.edu/fact-sheets/a-guide-to-plants-important-for-quail-in-oklahoma.html

Manipulate fallow fields for late dove season – Late-season dove hunting can be excellent on fields with abundant grain, especially corn and grain sorghum. If you have retained standing grain, it can be manipulated by mowing in November to attract concentrations of dove throughout December. extension.okstate.edu/fact-sheets/dove-field-management.html

Equipment winterization – When not in use, drain water from tanks, hoses, pumps and nozzles on fire and herbicide equipment to prevent unnecessary freeze damage. extension.okstate.edu/fact-sheets/prescribed-burn-equipment.html

Prepare firebreaks – Firebreaks need to be maintained and ready so when conditions allow, fire can be used to meet land objectives. Be sure the width and type of fire break is adequate for the fuels in the burn unit. extension.okstate.edu/fact-sheets/firebreaks-for-prescribed-burning.html

December

Conduct burns in forest – In areas with a heavy canopy of oak, burning just after leaf fall (typically late November) is a good time as the fuel will be dry and fluffy. Waiting until later in the year often results in compressed leaf litter and patchy fires in forests. extension.okstate.edu/fact-sheets/the-best-time-of-year-to-conduct-prescribed-burns.html

Conduct camera surveys for deer – If you want to determine sex ratio, deer density and doe/fawn ratio, deer camera surveys can be effective. These camera surveys rely on identification of unique bucks by antler configuration and should be conducted prior to antler drop, which starts in early January. extension.okstate.edu/fact-sheets/using-camera-surveys-to-estimate-white-tailed-deer-populations.html

Monitor fall food plots – Control weeds in fall food plots, if needed and top-dress nitrogen if plants show stress from deficiency. Thistle is easier to control during fall before it begins to bolt in the early spring. extension.okstate.edu/fact-sheets/integrated-management-of-invasive-thistles-in-oklahoma.html

Cut redcedar – Eastern redcedar can be controlled any time, but winter is a great time due to cool temperatures. Late winter and early spring is the primary wildfire period in Oklahoma. Removing this volatile fuel can make your community safer. extension.okstate.edu/fact-sheets/eastern-redcedar-as-a-hazardous-fuel.html. Place cut redcedars under



Burning forests after leaf fall is an effective way to maintain open woodlands. Removing the leaf litter and understory brush with fire will encourage grasses and forbs.

standing redcedar stands. When ignited by a later fire, many of the standing trees can be killed by the fire, saving time by not needing to cut all the trees. extension.okstate.edu/fact-sheets/cut-and-stuff-practices-for-enhanced-cedar-control-with-prescribed-fire.html

Stay off pond ice – Warn children to never go onto frozen ponds, even to rescue pets. A light ladder or sheet of plywood might be pushed out to a person or pet, allowing them to distribute their weight and climb out. In an emergency, these items need to be close at hand to be of any use.

A Land Ethic:

You may own property for financial, recreational or other reasons. Regardless of the reasons and objectives, the management done today can determine the long-term condition of the land and limit opportunities for other uses. There is an ethical dimension to land ownership worth deliberate thought and careful attention.

Reflecting on land stewardship values and determining if they align with management is a good first step. In addition, consider the broader consequences of your actions.

- Does my management limit future options for the land? Some actions are easily reversible, while others are not. For example, accelerated soil erosion can be stopped and mitigated, but topsoil cannot be replenished and the sediment damages streams and waterbodies for generations to come.
- How will my heirs or future owners use this land, and do my actions inhibit this? This may not be a top concern, but it is worth considering. At a minimum, poor management will lower the resale value of the property, or lessen your heir's ability to enjoy it.
- How do my actions affect my neighbors and my community? For example, a particular invasive plant or animal may not negatively affect you, but invasive species do not stay confined to your property and can affect everyone.

By asking tough questions, self-reflecting and incorporating your ethics into land management, you are more likely to reach your long-term goals and objectives, as well as have greater satisfaction in land ownership. Most of us want our actions to benefit society and the environment and we realize that actions do not occur in a vacuum. Thinking broadly about land stewardship, we realize management across the landscape has an interactive effect, far beyond individual property lines.

"All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. The land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively the land."

Aldo Leopold, A Sand County Almanac

Tell us what you think — email feedback to Dwayne Elmore at dwayne.elmore@okstate.edu. What are your experiences with managing land and ponds? What is your opinion or experience on any or all of these practices?

The Oklahoma Cooperative Extension Service

WE ARE OKLAHOMA

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

Oklahoma State University, as an equal opportunity employer, complies with all applicable federal and state laws regarding non-discrimination and affirmative action. Oklahoma State University is committed to a policy of equal opportunity for all individuals and does not discriminate based on race, religion, age, sex, color, national origin, marital status, sexual orientation, gender identity/ expression, disability, or veteran status with regard to employment, educational programs and activities, and/or admissions. For more information, visit <https://eeo.okstate.edu>.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President for Agricultural Programs and has been prepared and distributed at a cost of 40 cents per copy. 01/2021 GH.