**CONSERVATION PRACTICE SPECIFICATION**  
**Upland Wildlife Habitat Management - 645**

**Upland Wildlife Habitat Management – 645** provides conservation planners with procedures and additional requirements for developing site-specific plans for upland wildlife habitat management for many species and habitat types. Landowners should specify target species to be managed for and obtain input from wildlife biologists before implementing specific management actions.

Planning alternatives will be evaluated with the ND-NRCS Wildlife Habitat Evaluation Guide (WHEG). The guide evaluates land uses with varying management for general habitat quality and is found in FOTG Section I – Reference Subjects – Biology subsection. To implement Upland Wildlife Habitat Management (645), requirements for the planned wildlife must be available or created according to a management system or the land use managed for general wildlife requirements, resulting in a score of 0.5 or higher for each planned land use.

NRCS shall not adversely impact a federally listed Threatened or Endangered species or its habitat while providing technical or financial assistance. Considerations must also be made for Candidate species while providing technical or financial assistance. NRCS policy on the Endangered Species Act is in Section 2 of the FOTG.

All land provides habitat for some wildlife species. Cropland, pastureland, woodland, and rangeland all produce and support wildlife by providing some or all of the basic habitat elements of food, shelter, water, and living space. Habitat value depends on the quality, quantity and interspersion of those elements. Target species’ habitat requires all elements within the species’ home range. Wildlife have daily and seasonal home ranges. Vegetative habitat components must be interspersed to provide feeding areas near escape, nesting, and thermal cover. Winter thermal cover is the limiting factor and must be a primary consideration for most of North Dakota’s targeted wildlife species.

Habitat management must be viewed holistically rather than as a specific effort. Evaluate the unit in the context of the surrounding landscape. Management geared toward improvement for one species may negatively affect other species. An example would be increasing habitat edge to improve pheasant habitat, while having the detrimental effect of decreasing habitat quality for edge generalist species such as many grassland nesting birds. Grassland nesting birds have shown steep and more consistent declines than any other bird group in North America (Knopf 1994).

The planner’s primary wildlife management tool is the manipulation of vegetative habitat components. Use this section as guidance to evaluate existing habitat and provide alternatives to improve existing habitat or establish needed habitat. Consideration should be given to habitat elements including edge, fragmentation, corridors, and thermal quality.

“Edge” refers to the interface where two or more cover types meet or where structural variations within plant communities come together. Horizontal edge can be the interface between introduced grass and a small grain field. Vertical edge can be the interface between a forest and native grass. Edge habitat is an important consideration in habitat management. Edge specialist species that thrive along habitat edges include white-tailed deer, red-tailed hawk, great horned owl, pheasant and robin. Predators often concentrate hunting activities along habitat edges.

Fragmenting habitat into small, isolated patches, characterized by abundant edge, modifies spatial conditions making some species more vulnerable to predation. Extreme fragmentation may isolate wildlife populations, such that they may not be viable.

**NOTE:** Underlined items are required for meeting the FOTG Practice Standard 645-Upland Wildlife Habitat Management.
Corridors can be used to connect wildlife habitats and reduce fragmentation impacts. Corridors can increase habitat edge, but benefits of connecting fragmented habitats may outweigh the impact of isolated habitats. Corridor establishment can be herbaceous, woody, or a combination of herbaceous and woody vegetation. Corridors must be of sufficient width to offer escape cover in addition to travel cover. Corridors failing to provide sufficient escape cover result in high mortality due to predators as well as significant snow drifting in winter. The best corridors are designed to fit the landscape such as low riparian areas.

Thermal cover in North Dakota must address relief from heavy snowfall as well as relief from extreme cold temperatures and wind. Blizzard type snowfalls can cover wildlife resulting in entrapment or suffocation. Wildlife impacts are minimized by capturing snow on the upwind side of the habitat resulting in reduced accumulation on the leeward side. Effects of cold and wind are minimized by locating thermal habitats with south aspects to protect from prevailing winds and maximizing available solar energy. Thermal cover can be multi-row woody cover, shrub plantings or intact upland or wetland vegetation with a substantial and persistent vertical component.

If possible, avoid disturbance during the **Primary Nesting Period from April 15 to August 1**. Avoiding nesting cover disturbance during this period is the simplest action a landowner can take to benefit ground-nesting birds. Cover loss at this time can result in nest abandonment forcing re-nesting in sub-standard habitats. When establishing nest cover for waterfowl, game birds, and other ground-nesting birds, minimize edge predation impacts by planting large blocks as opposed to narrow, irregular strips. Several waterfowl species utilize cool season grass species for nesting, presumably due to early green-up. Also consider establishing or managing for pollinator plants, as insects are a vital food for waterfowl and upland chicks soon after hatching.

**Rangeland**

Native prairie provides many wildlife species a portion or all of their necessary life requisites. Rangeland management with the primary goal of habitat management may differ from Rangeland management for grass or livestock production.

- Use conservation practices Prescribed Grazing (528), Use Exclusion (472) and/or Prescribed Burning (338) to provide high quality grass and riparian habitat. Grazing systems need to be designed to provide residual cover in order to be attractive to grassland nesting birds. Grazing may be used to promote a variety of plant community transitional stages.

- Consider the following guidelines when designing grazing systems for wildlife habitat.
  - The overriding goal is to design and manage the prescribed grazing system to produce a healthy, vigorous and diverse plant community meeting the life requisites of grassland dependent species. Adjustments may include modifying the timing, frequency, and intensity to produce a patchwork of differing cover heights across the pasture(s).
  - Changing season of deferment from year-to-year and ensuring adequate recovery periods for pastures grazed more than once during the grazing season are required elements of prescribed grazing.
  - Management flexibility needed to meet plant community and wildlife cover goals is increased as the number of pastures within the rotation increases.
  - Non-use has proven to be detrimental to native plant community health and vigor. Excessive rest favors invasion and increase of Kentucky bluegrass and Smooth bromegrass, displacing native species and reducing plant diversity. Detrimental effects of non-use on native plant communities are reflected more quickly in areas of higher fertility and precipitation. Generally, this means non-use periods must be shorter in the tall grass prairie of eastern North Dakota than the mixed-grass prairie of central and western North Dakota.

NOTE: Underlined items are required for meeting the FOTG Practice Standard 645-Upland Wildlife Habitat Management.
• See the appropriate FOTG Section 2 – Ecological Site Descriptions and Reference Worksheets by MLRA for additional guidance on habitat manipulation. Also review the Plant Communities and Transitional Pathways diagram to predict vegetative changes expected by different management techniques, including duration of rest periods.

• Where appropriate, manage woody draws as separate pastures to better control timing, frequency and intensity of grazing. This minimizes browsing and allows regeneration of shrubs and trees to promote age-class and species diversity as well as herbaceous understory.

• Pastures grazed only once early in the season, may provide enhanced winter cover and nesting cover the following spring. Plant vigor will be maintained or enhanced by designing the system with sufficient pastures so that grazing periods are 10 days or less. This will minimize the opportunity for livestock to graze plant re-growth during the grazing period.

• Grazing some pastures once and others twice is a viable design provided recovery periods between grazing events are adequate.

• Planting woody cover on native prairie requires review and approval by a NRCS biologist. If woody species are desired, plant native shrubs in areas mimicking natural habitat such as woody draws. Rangeland shall not be converted to a shelterbelt type planting to provide winter cover for resident wildlife species.

• Native grass or forb species should be considered for land use changes planned adjacent to rangeland.

Planted Native Herbaceous Cover

Native plant materials are adapted to the local soils and climate and may persist longer than non-native species. Natives may take longer to establish from seed, but generally require less maintenance over time. Consider native seeding on areas that are not profitable or a nuisance to farm such as low-yielding soils, irregular lobes or wedges.

• Establishing native herbaceous plants will be completed in accordance with conservation practice Range Planting (550) or Restoration and Management of Rare or Declining Habitats (643).

• Consider appropriate species and life form diversity (functional/structural groups) including bunchgrasses, sod-forming grasses, and forbs including pollinator friendly species. Include warm-season and cool-season species, when possible.

• Increase erect, bunchgrass species where thermal cover is a primary consideration.

• Management, including grazing and/or haying and/or fire is critical to maintain productivity, vigor, and forage quality for wildlife. Wildlife may avoid the pasture during or immediately following management but often make heavy use of fresh regrowth after the event. See Rangeland above for additional management considerations.

Introduced Grasses and Legumes

• Forage and Biomass Planting (512) will be followed to establish introduced grass and legumes, unless, based on wildlife species’ habitat needs warrant varying from the Forage and Biomass Planting (512) Table 1. Mixture Compatibility and Allowable Limits. Varying from Table 1 should be based on species habitat needs and must be approved by the SRC.

• Avoid species considered invasive in North Dakota. See Herbaceous Vegetation Establishment Guide.

• Non-rhizomatous, stiff-stemmed alfalfas, such as Vernal, are preferred over hay-type varieties.

• Plantings for wildlife will include grasses and legumes/forbs providing thermal habitat at least 15 inches tall in the fall. The cover will provide at least eight inches of standing nesting cover the following April. This requirement may be waived where soils will not support growth to meet the minimum height.

NOTE: Underlined items are required for meeting the FOTG Practice Standard 645-Upland Wildlife Habitat Management.
• Periodic management is vital to maintain habitat quality of tame grass cover. Grazing, mowing, burning or light disking may be used as appropriate. Habitat management must consider species, stand vigor, present and future impacts. A rule of thumb would be; for large parcels, manage 25 percent of the cover per year; for smaller parcels, manage 100% of the area about every fourth year.

• Select late maturing species, allowing grassland-nesting birds to fledge before the first cutting operation.

• Delay haying on at least part of the fields.

• Haying after July 1 may offer the best hay quality and may offer some opportunity to stimulate cool season grass species.

• Haying after July 15 allows some grassland nesting species to fledge

• Haying after August 1 allows most grassland nesting species to fledge and become mobile enough to avoid equipment

• Avoid cutting hay from the outside in. This “herds” wildlife to the center of the field and forces wildlife out of protective cover upon trying to escape. Instead, mow back and forth working from one side or mow from the inside to the outside, allowing wildlife to utilize remaining cover to escape.

• Consider flushing bars on swathers and mowers.

• Nest predation by red fox, skunk, badger, raccoon, and other predators is reduced when blocks of 40 acres or larger are established.

• Consider perennial herbaceous vegetation plantings for areas that are not profitable or a nuisance to farm such as low-yielding soils, irregular lobes or wedges, and small fields.

• Native grass or forb species should be used in plantings planned adjacent to rangeland.

• Field Border (386) may offer up wildlife benefits to pollinators and other edge generalist wildlife species. See specification for details. Establishment of field borders may increase edge effect and may have detrimental effects to some species.

Native Forestland

• Forestland represents habitat for many wildlife species and a potentially significant income source for private landowners. These values are compatible if resource planning is combined with proper management.

• Forests of mixed-species and age-classes maximize habitat diversity. Selective harvest methods maintain this diversity.

• Lack of management can result in low forest diversity.

• Dense stands of timber are valuable to most big game, except pronghorn, and mule deer.

• Some species, such as the goshawk and chickadee depend on old-growth forest.

• Large, uniform conifer forests may be improved for wildlife by creating small, irregularly shaped openings. Always consider this increases edge effect and could be detrimental to some species.

• Over-mature trees, snags and downed logs provide habitat for cavity nesting birds and many mammals. Some cavity-nesting birds can excavate holes in hard snags but others must have soft, decayed wood in order to excavate nest cavities. Cavity nesting birds, such as woodpeckers, chickadees, nuthatches and others help control forest insects.

• Prescribed Grazing (528) will be applied to provide long-term benefits to native woody communities. Grazing will be managed such that native trees and shrubs are not damaged by excessive browsing or rubbing. Timing and grazing intensity will not result in root or root crown damage.
• Avoid grazing under wet soil conditions as damage to woody plants can happen quickly with long-lasting effects.
• Limit riparian timber harvest. Coarse woody debris is crucial to maintaining fish habitat structure. Leaves supplied by riparian vegetation fuel the food chain in headwater streams. Do not remove fallen logs from streams.
• Use artificial nest boxes—where tree cavities are limited—to favor species as mountain bluebirds and wood ducks. For design specifications, go to the USGS Northern Prairie Wildlife Research Center website and search for “nest box”.

Native Shrublands

Native shrublands are not recognized as a stand-alone landuse. Native shrublands are recognized as a habitat included in some (not all) rangelands, riparian zones, wetlands and native forest.

• Important wildlife shrubs include big sagebrush, silver buffaloberry, serviceberry, chokecherry, hawthorn, western snowberry, sandbar willow, and many others.
• Planning Brush Management (314) for improved wildlife habitat or increased forage production should be reviewed by an NRCS Biologist.
• Prescribed Grazing (528) will be applied to benefit native upland and riparian shrub communities as well as declining, indigenous wildlife species.

Big sagebrush-grassland acreage has decreased due to cropland conversion and brush control. Sage grouse, Brewer’s sparrow, pronghorn antelope, and other species are dependent on this habitat.

Planted Woody Cover

Planted woody cover provides thermal, reproductive and escape cover, as well as food in the form of seeds, fruits, nuts, buds, catkins, twigs and leaves. Woody plantings usually increase edge habitat and negatively impact edge-sensitive species. Woody cover plantings seldom create forest habitat needed for area sensitive forest species. These plantings favor species using woodland habitat for a portion of their life requisites.

• Opportunities exist for planting shrubs beneficial to wildlife in and around cropland. Native suckering shrub thickets can be planted in odd areas between fields. Windbreaks add habitat diversity to cropland monoculture. Consider using at least two shrub rows in field windbreaks.
• Woody plantings should be avoided inside and within 150 feet of large blocks of grassland. Plantings in these settings contribute to habitat fragmentation. Most grassland birds are edge-sensitive.
• Federally listed Threatened or Endangered species planning must adhere to planning requirements agreed to between USFWS and NRCS.
• Woody plantings will follow conservation practice Windbreak/Shelterbelt Establishment (380) or Tree and Shrub Establishment (612). Refer to “Tree and Shrub Characteristics” in FOTG Section I - Reference Subjects - Windbreaks and Woodland subfolder, for recommended wildlife trees and shrubs and individual species information. For adaptation of woody plants to specific soils and climate, refer to FOTG – Section II – Windbreaks and Forest – Expected 20 Year Tree Height and Windbreak Suitability Group Descriptions.
• Improve or renovate decadent woody plantings following Windbreak/Shelterbelt Renovation (650).
• Woody plantings shall consist of five or more rows or a random design equivalent.
• Woody plantings for thermal cover should be a minimum of 15 rows with preference given to shrubs over trees to provide dense cover for wind protection.
• Windward row must be shrubs or spruce providing a dense barrier from the ground level to the entire plant height.

NOTE: Underlined items are required for meeting the FOTG Practice Standard 645-Upland Wildlife Habitat Management.
• The leeward row shall be shrub species. Fruit-bearing shrubs are preferred, providing a winter food source.
• Between-row spacing shall not exceed 16 feet.
• Within-row spacing: shrubs 3 - 6 ft., conifers 6 - 12 ft., trees 6 - 16 ft.
• At least 25% of the planting should be suckering shrubs.
• Avoid installing synthetic weed barrier on suckering shrubs, or remove three to five years after planting.
• Woody plantings on native prairie require review and approval by a NRCS Biologist. If woody species are desired, plant native shrubs in areas mimicking natural woody draws. Rangeland shall not be converted to a shelterbelt-type planting to provide winter cover for resident wildlife species.
• Establish a snow trap 50-200 feet upwind to prevent snow from impacting primary thermal habitat and winter food sources. Trees and shrubs are preferable; however, tall grasses or unharvested, standing corn can also be used.
• Establish a secondary windbreak to protect food and cover from storms from the south or east.
• In appropriate landscapes, consider conservation practice Riparian Forest Buffer (391) to connect isolated woody plantings with travel corridors. Connect grassland habitats with Riparian Herbaceous Buffer (390) corridors instead of woody corridors.
• Orient the woody planting east and west when possible to provide a sheltered southern exposure for increased thermal cover.
• Tall trees provide raptor perches and should not be used near herbaceous habitat.
• Forest habitat for area sensitive species should be at least 20 acres and contain a diversity of form, height and flowering/fruiting phenology. Forest habitat should provide dense areas (thickets) of suckering shrubs and native trees. No single species should be planted in an entire row.
• Avoid using invasive species such as Russian olive, Siberian elm, Rocky Mountain juniper and eastern red cedar adjacent to native or tame herbaceous cover.
• Consider Woody Plantings on former forest areas that are not profitable to crop due to low yield, irregular shape or small size.

Grain and Seed Crops

• To provide wildlife habitat on cropland.
• Where wildlife is a secondary resource concern, grain and seed crops can provide food and cover for some species.
• Apply no-till or minimize tillage to the extent practical. Leave stubble standing or nearly upright and at least ten inches high over winter to increase available food and thermal cover for resident wildlife. No-till fields have some early nest mortality due to machinery, but have a comparatively high success rate for later/second nests.
• Include winter wheat or winter rye in the rotation where feasible.
• Preferred grain and seed crops include, but are not limited to, corn, wheat, barley, oats, millet, sorghum, sunflowers, lentils and winter wheat. Soybeans, buckwheat, flax, rye, and sudangrass, may also be used as food plots but are less preferred by most wildlife species.
• Leave strips of unharvested crop adjacent to winter cover.
• Waste grain supplements many wildlife species during fall and winter.
• Consider Field Borders (386) for wildlife.
• Consider Cover Crop (340) for wildlife.
• Full season cover crops provide significantly more food and habitat than seasonal cover crops.

NOTE: Underlined items are required for meeting the FOTG Practice Standard 645-Upland Wildlife Habitat Management.
• Incorporate cover crops in the rotation to provide food and cover.
• Tall cover crops (corn, sunflower, and sudangrass) provide escape and thermal cover.
• Early cover crops provide suitable nesting habitat for pheasants and other grassland nesting birds if they have adequate structure and are left undisturbed through the nesting period.
• Most cover crops do not provide vertical structure necessary to provide winter cover from heavy snow and prolonged cold.
• Cover crop mixes designed to improve soil health provide high protein forage for deer, pronghorn and other species.
• Diverse cover crops provide diverse insect species which provide pollinator benefits and food opportunities for birds, especially young chicks. This is especially true for broad-leafed cover crops, like peas, lentils, sunflower, safflower, soybean, cow pea, canola, and clovers.
• Cover crop mixes, such as turnip and radish, as well as soybeans, field pea, corn, sunflower, millet and sorghum provide quality winter food, if left to mature.

Food Plots

• When planted specifically for wildlife, food plots can provide limited nesting, roosting, and winter cover.
• Food plots will be at least one-half acre in size and should not exceed 5 acres.
• See species accounts or the ND-CPA-645 workbook for an individual species’ food needs.
• One pheasant needs approximately 1 bushel of corn for a 5-month winter feeding period.
• One deer needs approximately 8 bushels. Design food plots according to known or anticipated wildlife species and populations. See 645 forms for a food plot size calculator.
• Food plots will be located adjacent to or less than one-quarter mile from winter cover.
• Consider food plot species and varieties resistant to lodging and shelling out where snow accumulations are significant.
• Consider establishing perennial food plots. Only those sites relatively free of weeds and invasive species (both plants and seed bank) are suitable for perennial food plots. Vigilance and timely weed control prior to and during the establishment period is required. Sites with weed problems should be maintained weed-free for at least two years prior to planting. Utilizing glyphosate-tolerant species as annual food plot are suggested to allow aggressive weed control.
• Select species compatible with the soil capabilities. Diverse native grass and forb mixtures are recommended. Preference should be given to bunch grasses over sod-formers. Do not exceed 25% grass species.

A suggested perennial food plot seed mix is listed below. Note the forb seeding rate is double the percent seed count number, to compensate for less aggressive performance observed in the field.

**Suggested Seed Mix for Perennial Food Plots in ND**

<table>
<thead>
<tr>
<th>Species</th>
<th>Variety</th>
<th>Percent</th>
<th>Rate PLS LB/AC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grasses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sideoats grama</td>
<td>Pierre or Killdeer</td>
<td>5</td>
<td>0.375</td>
</tr>
<tr>
<td>blue grama</td>
<td>Bad River</td>
<td>5</td>
<td>0.125</td>
</tr>
<tr>
<td>switchgrass</td>
<td>Dacotah</td>
<td>5</td>
<td>0.225</td>
</tr>
<tr>
<td>Canada wildrye</td>
<td>Mandan</td>
<td>5</td>
<td>0.375</td>
</tr>
<tr>
<td>green needlegrass</td>
<td>Lodorm</td>
<td>5</td>
<td>0.375</td>
</tr>
</tbody>
</table>

**subtotal** 25

**NOTE:** Underlined items are required for meeting the FOTG Practice Standard 645-Upland Wildlife Habitat Management.
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Forbs (lb./acre rate shown is doubled from percent seed count shown)

| Species              | Source                  | Rate | Rate
|----------------------|-------------------------|------|------
| blanket flower       | Northern source         | 5    | 0.7  |
| black-eyed susan     | Northern source         | 5    | 0.08 |
| blue flax            | Appar                   | 10   | 0.76 |
| yellow coneflower    | Stillwater              | 5    | 0.15 |
| purple prairie clover| Bismarck or northern    | 15   | 1.14 |
| white prairie clover | Antelope or northern    | 15   | 1.17 |
| Canada milkvetch     | Northern source         | 10   | 0.8  |
| Maximilian sunflower | Medicine Creek          | 5    | 0.1  |
| stiff sunflower      | Bismarck                | 5    | 1.28 |

Subtotal 75

Total 100

See Wildlife Annual Food Plot Fact Sheet in the 645 Reference page for crop and rate details.

If pesticides are used read and follow the pesticide label for application rates, authorized use information and Federal, State or local restrictions.

Wetlands as Associated Habitat

Herbaceous and woody plants adapted to moist or wet sites provide valuable habitat for many upland wildlife species. Cattails, bulrushes, sedges, and willows provide important winter cover for pheasants, white-tailed deer, and other upland wildlife. See the Wetland Wildlife Habitat Management (644) standard and specification for additional wetland habitat considerations.

Wildlife Species Accounts

Wildlife species accounts formerly found in the 645 Specification are now found on the National NRCS website, the North Dakota Game and Fish Department website as well as the US Fish and Wildlife Service website. Wildlife species accounts typically include morphology, habitat, food, water, migration, breeding, nesting and thermal needs.

Landowners are encouraged to identify one or more wildlife species to target their habitat management efforts. Planners are encouraged to learn about and share with the landowner those species’ habits and life requisites. Planners can then suggest management strategies which fit the landowner’s overall farm or ranch plan while remaining productive and profitable.

Detailed NRCS species accounts may be found at [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/plantsanimals/fishwildlife/pub/?cid=nrcs143_022362](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/plantsanimals/fishwildlife/pub/?cid=nrcs143_022362)

More general accounts may be found at the North Dakota Game and Fish Department’s website. Choose the WILDLIFE tab or use [http://www.gf.nd.gov/wildlife](http://www.gf.nd.gov/wildlife)

Additional species accounts are in the North Dakota Game and Fish Department’s State Wildlife Action Plan at [http://gf.nd.gov/wildlife/swap](http://gf.nd.gov/wildlife/swap)

Operation and Maintenance

- Manage vegetation in accordance with applicable criteria listed in this document. As appropriate, follow additional wildlife criteria for applicable conservation practices:

  - 314 - Brush Management
  - 647 - Early Successional Habitat Management
  - 511 - Forage Harvest Management
  - 595 - Pest Management
  - 338 - Prescribed Burning
  - 528 - Prescribed Grazing
  - 472 - Use Exclusion
  - 666 – Forest Stand Improvement

- Control noxious weeds in accordance with State and local laws.

CHECK OUT AND DOCUMENTATION

- Use the ND-NRCS Wildlife Habitat Evaluation Guide (WHEG) to assess the benchmark condition and the planned condition of each landuse. Planned condition must meet 0.5 or greater for each landuse to meet NRCS quality criteria for Upland Wildlife Habitat Management (645).
- Use the applicable worksheets in Form ND-CPA-645 to document this practice.
- Confirm management of vegetation by a field check in the fall. In the remarks section of the applicable ND-CPA-645 worksheet(s), record any disturbance to vegetation such as weed clipping, grazing, or haying. Record residual cover height. Record extent/density of noxious weeds, if any, and whether or not control efforts are satisfactory.

REFERENCES:

Stewart, R. E., Breeding Birds of North Dakota, 1975, Tri-College of Environmental Studies, Stevens Hall, North Dakota State University

Grondahl, Chris, and John Dockter. No Date. Building nest structures, feeders, and photo blinds for North Dakota Wildlife. North Dakota Game and Fish Department, Bismarck, ND. Jamestown, ND: Northern Prairie Wildlife Research Center Online