Specific Habitat Management Practices, By Activity

HABITAT CONTROL

GRAZING MANAGEMENT

(Refer to Appendix D - Livestock Recommendations, for information to help prepare a specific grazing proposal for the plan.)

Grazing management, which may include deferment, is the planned manipulation of livestock numbers and grazing intensities to increase food, cover, or improve structure in the habitat of selected species. Grazing management includes: 1) kind and class of livestock grazed, 2) determination and adjustment of stocking rates, 3) implementation of a grazing system that provides planned periodic rest for pastures by controlling grazing intensity and duration, and/or 4) excluding livestock from sensitive areas to prevent trampling, allow for vegetative recovery, or eliminate competition for food and cover. Planned deferments can be short or long term up to 2 years. Extended rest from grazing (two years or more, if necessary) may be required on some ranges. Seasonal stocker operations may be appropriate to manipulate habitat. Supplemental livestock water (earthen tanks, troughs, wells, piping) to facilitate deferred-rotation grazing of livestock and disperse grazing pressure may be incorporated into planning to improve wildlife habitat. Similarly, it is important to plan and design fence construction to facilitate deferred-rotation grazing of livestock. Fencing can also be used to enhance or protect sensitive areas, woodlands, wetlands, riparian areas and spring sites as designated in plan. Activities should be reviewed annually.

Grazing management systems might include:

- 1 Herd / 3 Pasture (preferably as a step in moving toward a 1 herd / multiple pasture {4+} grazing system)
- 1 Herd / 4 Pasture
- 1 Herd / multiple pasture multiple herd / multiple pasture (goal is to move toward always resting 75% of area)
- High intensity/low frequency (HILF)
- Short duration system

- Other type of grazing system (ex. a short-term stocker system):
- Planned Deferment (e.g., number of years livestock will be deferred from the property, etc.):

PRESCRIBED BURNING

(Refer to Appendix E - Vegetation Management Recommendations, for information to help prepare a specific burning proposal for the plan.)

Prescribed burning is the planned application of fire to improve habitat quality by reducing woody vegetation and increasing plant diversity. Plans should indicate a minimum percent of acreage and general burning cycle **(eg., an 8 to 15 year burning cycle in the Trans-Pecos so that approximately 10% of the designated area is scheduled for burning each year)**. Attach a written burning plan as an addendum to the Wildlife and Habitat Management Plan (burn plans and prescribed burning should only be attempted with aid of professionals). The plan should include a map that shows the areas to be burned and the planned dates (month and year) that each area will be burned during the burning cycle. It should also designate areas to be protected from burning, and should incorporate flexibility during periods/ years when conditions are not favorable. Specific areas (eg., sensitive sites) to be protected from burning should be briefly described and shown on a map.

RANGE ENHANCEMENT (Range Reseeding)

Establish native herbaceous plants (grasses and forbs) that provide food and cover for wildlife or erosion control benefits. Plant species selected and methods for establishment should be applicable to the county. Seeding mixtures providing maximum native plant diversity are recommended. Many herbaceous broadleaf plants (known as forbs, weeds, or wildflowers) are beneficial to wildlife for forage and/or seed production. Encourage "weed and wildflower" species by selective application of chemical, biological (eg.,

grazing management) and/or mechanical means on native rangelands, Conservation Reserve Program lands, and tame grass pastures (eg., coastal bermuda, Old World bluestem, etc.). Some periodic weed control may be needed in fields converted to native rangeland to assist in the establishment of desirable vegetation (see Appendix U). This practice must be a part of an overall habitat management plan and designed to reestablish native habitats within a specified time frame. **Range Enhancement should annually affect a minimum of 10% of the total area designated in the plan, or a minimum of 20 acres annually, whichever is less, until the project is completed.**

BRUSH MANAGEMENT

(Refer to Appendix E - Vegetation Management Recommendations, for information to help prepare a specific brush management proposal for the plan.)

Removal of salt cedar through precision aerial application of herbicide can increase plant diverisy, enhance habitat for wildlife and help restore instream water flow.

Brush management may be the removal or establishment of woody plants.

It can be the selective removal or suppression of target woody species, including exotics, to allow the increased production of desirable trees, shrubs, grasses, and forbs for forage and nesting or protective cover for selected species. **Brush Management practices should annually affect a minimum of 10% of the total area designated in the plan, or a minimum of 100 acres annually, whichever is smaller.** This practice includes retaining the proper kind, amount, and distribution of woody cover for selected species. Brush management planning must consider wildlife cover requirements, soil types, slope angle and direction, soil loss and erosion factors, and subsequent planning to control re-invasion. This practice also includes retention of snags to provide cover and nesting sites for cavity nesting animals. When used, herbicides should be applied in strict accordance with label directions.

This practice can include **the planting of a minimum of 50 native plants (trees and/or shrubs) per year for the area designated in the plan** to provide food, corridors and/or shelter using species and methods applicable to the region. In areas virtually devoid of woody cover, a practice that is beneficial to quail, songbirds, and other species that use low-growth woody cover involves the establishment of irregular mottes (clumps) of shrubs one-tenth of an acre in size. Mottes should contain approximately 30 seedlings (i.e., skunkbush sumac, littleleaf sumac, four-winged saltbush, prickly pear, catclaw acacia, condalia spp.) at a spacing of about 12’ between seedlings to allow for crown development at maturity. Establish a minimum of one planting per 2 acres in areas devoid of woody cover or a minimum of one planting per 5 acres in areas where woody cover exists but is considered insufficient. For most sites

in the Trans Pecos, irrigation of woody plantings is necessary for the first 3-5 years to improve survival. **Woody plant establishment should annually affect a minimum of 10% of the acreage designated in the plan or a minimum of 5 acres annually, whichever is less.**

VEGETATION SURVEYS

Annually survey vegetation transects (normally fall or spring) and identify grass, forb and woody species to evaluate the impact of management practices on range condition and range condition trend. This practice can provide important information regarding changes in habitat quality over time. **A minimum of five, 300-foot permanent transects are required for each major vegetative type.** Surveys should be conducted using standard methodology to identify 100 plants per transect (i.e., identify a plant every 3 feet along the transect line).

FENCE MODIFICATION

Modify net-wire or "sheep-tight" barbed-wire fences to allow free movement of pronghorn antelope and/or bighorn sheep. Pronghorn antelope and bighorn sheep will rarely jump over fences; therefore, net-wire and sheep-tight barbed wire fences often serve as effective barriers to movement. However, antelope and bighorn sheep can easily negotiate 4-strand, barbed-wire fences by crawling under or through the wires. The long-term survival of antelope and bighorn herds is dependent on their ability to move long distances on a seasonal basis to find the best habitat conditions available, especially as conditions relate to forage quantity and quality. Long-distance movements also may be necessary to access a remnant water source during drought. In addition, individuals may be more susceptible to predation when they venture near these barrier-type fences. This is particularly true for antelope fawns (see Appendix K).

This practice can include the development of "gaps" in the fence by folding up the lower portion of sheep-netting and stapling it in place, such that a 16-18" space is created between the wire and the ground. This practice can also include replacing sections of net-wire with 4-strand barbed wire, or replacing entire net-wire fences with barbed wire. The bottom wire should be located 16-18" above the ground. The greater the freedom of movement for antelope and bighorn herds, the better their chances for long-term survival. **The minimum intensity of this practice to qualify is a 100-yard gap installed for every ½ mile of net-wire fence that exists within the range of the target species. A fence modification project will qualify for 5 years, and a**

minimum of 20% of the designated fencing must be modified annually.

RIPARIAN MANAGEMENT AND ENHANCEMENT

Annually and seasonally protect the vegetation and soils in riparian areas (low areas on either side of stream courses) from mismanagement, such as caused by excessive, long-term livestock trampling. Riparian management and enhancement can include providing livestock with alternate watering sites, deferring livestock grazing in pastures with riparian areas during critical periods of the year, total exclusion of livestock from pastures with riparian areas, and fencing riparian areas to exclude or provide short duration grazing by livestock. Establish trees, shrubs, or herbaceous vegetation along streams or water courses to provide food, cover, and travel corridors, and to reduce erosion. Corridors should be at least 100 yards wide. Refer to "Agroforestry Notes - A Riparian Buffer Design for Cropland" (AF Notes-5, January 1997) by the U.S. Forest Service that gives details for establishing a 50 ft. wide strip of grass, shrubs, and trees between a stream and cropland. Restore important forested habitats including bottomland hardwoods and turkey roost sites. **A minimum of one Riparian Management and Enhancement project must be implemented and maintained every 10 years to qualify.** See Appendix E.

Proposed riparian management and enhancement projects might include:

- Fencing
  - complete fencing of riparian areas
  - partial fencing of riparian areas
- Deferment from livestock grazing
  - complete deferment
  - periodic deferment.
- Establish vegetation
  - trees
  - shrubs
  - herbaceous
  - both sides of stream
  - one side only

WETLAND ENHANCEMENT

Annually provide seasonal or permanent water for roosting, feeding, or nesting habitat for wetland wildlife. This practice involves shallow wetland management, creation or restoration, and other moist soil management such as rotational grazing or exclusion (fencing out) of livestock from wetlands, especially during the growing season. Selective herbicide

Over 50% of Texas' wetlands have disappeared. Wetland management, restoration or creation is extremely important for wetland dependent wildlife.

applications may be necessary for control of problem wetland vegetation. Annual management as described in management plan, such as water level manipulation qualifies. **Construction and maintenance of a new project will qualify for 10 years**.

HABITAT PROTECTION FOR SPECIES OF CONCERN

Planned protection and management of land or a portion of land to provide habitat for an endangered, threatened or rare species, such as fencing off critical areas, managing vegetation structure and diversity within species parameters, establishing and maintaining firebreaks to protect critical overstory vegetation, and annually monitoring the species of concern. This practice includes the management/protection of nesting sites, feeding areas, and other critical habitat limiting factors, and the development of additional areas.

The broad-scale management of habitat for migrating/wintering/ breeding neotropical birds (primarily songbirds) should follow guidelines in appendix for zones of importance. Refer to Appendix T for guidelines on the management of habitat for the black-capped vireo which occurs in certain oak-juniper woodlands in the Trans-Pecos Ecological Region. **A minimum of one project must be implemented every 10 years to qualify.**

Proposed projects for habitat protection for species of concerns might include:

- Planned protection/management projects:
- fencing
- firebreaks
- prescribed burning
- habitat manipulation (e.g. thinning, etc.)
- control of nest parasites
- native/exotic ungulate control
- other_____

PRESCRIBED CONTROL OF NATIVE, EXOTIC AND FERAL SPECIES

Removal of salt cedar helps increase plant diverisy, enhance habitat for wildlife and helps restore instream water flow.

Use legal means to control the number of grazing and browsing animals. Maintain the population density of native wildlife (particularly white-tailed deer — see Appendix F) at the carrying capacity of the habitat to prevent overuse of desirable plant species and enhance habitat for native wildlife species. Exotic species and feral animals should be strictly controlled to minimize negative impact on native wildlife and habitat. This should

incorporate harvest and vegetative monitoring over time to assess control intensity and impact on habitat to meet plan objectives. **Removal intensity should be documented as to species, number, control method, and date.**

Remove or control exotic vegetation impacting native habitats and wildlife populations (eg., large stands of naturalized saltcedar, etc.). Convert non-native grass pastures (such as large areas of coastal bermuda, kleingrass, old world bluestem) to native vegetation. **The removal or control of exotic vegetation or the conversion of non-native grass pastures must affect a minimum of 10% of the non-native vegetation on the property or 20 acres annually, whichever is less.**

WILDLIFE RESTORATION

Restoration or enhancement of habitat to good condition for target species, and reintroduction and population management of TPWD approved native species within the carrying capacity of the habitat as part of an approved restoration area at a scale capable of supporting a sustainable population (eg., pronghorn antelope, bighorn sheep, Mearns' quail).