ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL

PROJECT INFORMATION

Project Title: Atascacita Spring Grassland Restoration Treatment | **Project No. 07-107**

Region/GMU: Unit 1 | **HPC: Springervile**

Project Type: Mechanical and hand crew chainsaw thinning.

Project Description:
The Atascacita Grassland Restoration Project is part of the large landscape restoration effort to restore and improve transition/winter range conditions in GMU 1 and within the Mineral Environmental Management Area (EMA), a sub unit of the larger GMU 1 restoration effort. To date, over 2,000 acres of ponderosa pine forest restoration and prescribed fire projects have been completed within the Mineral EMA and over 11,000 acres have been treated over GMU 1.

The Atascacita Grassland Restoration Project involves the thinning of approximately 528 acres of ponderosa pine/grassland transition habitat in Game Management Unit 1 near Atascacita Springs on the Springerville Ranger District, Apache-Sitgreaves National Forest. The project is near the unincorporated community of Green's Peak Hideaways. Of the total project acres involved (528 acres) in this sub unit treatment, 226 acres are currently Forest Service funded ($100,000) and under contract for mechanical thinning by a private contractor and expected to be completed in early 2008. The remaining 302 acres (which funding is being requested) of ponderosa pine/grassland are planned for thinning treatments to restore more historic open parkland type conditions. Of the 302 additional acres, 166 will be mechanically thinned by a contractor ($62,100) and the remaining 136 acres will be thinned utilizing FS hand crews with chainsaws ($20,550).
NOTE: If total project cannot be funded, complete funding of one treatment method would accomplish that treatment.

The goal of this landscape restoration effort is to restore and improve habitat conditions within the limited and currently degraded transition/winter range habitat type in GMU 1. The degraded condition of this habitat type has been identified as a factor limiting certain wildlife populations by the local Wildlife Manager in the 171 District Habitat Management Plan. Specific issues associated with the transition habitat include encroachment of ponderosa pine trees into traditional grassland habitats with a resultant decrease in both herbaceous and woody browse plants. Desired results include an increase in the production of herbaceous and woody browse plants utilized by elk, deer, turkey, as well as an increase in predator sightability for pronghorn antelope.

Wildlife Species to Benefit: Elk, antelope, turkey, deer; improved winter range habitat.

Possible Funding Partners: AES, RMEF, NWTF, ADA, AND AAF

Implementation Schedule:	**NEPA Compliance: (if applicable)**
Beginning: 10/2007	**Completed: Yes __X__ No ____**
Completed: 12/2008	**Projected Completion Date:**

PROJECT FUNDING

SBG Funds Requested: $ 82,650

Cost Share Funds: $102,000

Total Project Costs: $184,650

(revised 6-05-2007)

PARTICIPANT INFORMATION

Applicant: Springerville Ranger District (please print) Vicente C. Ordonez **Telephone: (928) 333-4372**	**Address: Springerville Ranger District** **165 S. Mountain Ave.** **Springerville AZ 85938**
AGFD Contact and Phone No. Vicente C. Ordonez (928) 333-4372 **(If applicant is not AGFD personnel)**	
Coordinated with: AZ Game Fish Department, Springerville HPC	**Date: 08/07/2007**
Applicant's signature:	**Date:**

SEND COMPLETED APPLICATIONS TO:
Game Branch
2221 W. Greenway Rd.
Phoenix, AZ 85023
mdisney@azgfd.gov

WAS PROJECT PRESENTED TO THE LOCAL HPC? YES __X___ NO _____

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? NO IF SO WAS IT FUNDED?

NEED STATEMENT/PROBLEM ANALYSIS:
One of the most significant limiting factors affecting wildlife in GMU 1 is the lack of productive winter range/transition zone habitat. The loss of productive winter range/transition zone habitat is a direct result of the loss of natural fire cycles which maintained open forest conditions and increased understory forage production. Because most of this important winter range habitat has not had fire in decades, overstory trees have grown too large to be killed by prescribed burning. Mechanical treatment will first need to be completed before fire can be used to maintain the open forest and meadow conditions.

Lack of productive winter range/transition zone habitat not only has a direct adverse effect on wildlife populations like elk, turkey, deer, and antelope, but can also result in increasing depredation problems on adjacent private lands. Over the last seven years the Springerville Ranger District, in cooperation with Arizona Game and Fish Department, Springerville HPC, Arizona Elk Society, Rocky Mountain Elk Foundation, Antelope Foundation, Eastern Arizona Counties RAC, and the Arizona Deer Association (Formerly Arizona Mule Deer Association) have treated over 5,000 acres of winter range habitat.These treatments have resulted in restoring habitat conditions and increasing habitat productivity for a variety of big game species.

PROJECT OBJECTIVES:
Improve winter range habitat and restore grasslands within critical winter range habitat. This will result in;

- Improved forage quality and quantity within critical winter range habitat.
- Modify vegetative class to allow for natural fire cycle to be reintroduced back into system.
- Improve watershed conditions.
- Improve predator sightability for mule deer, elk, and pronghorn antelope.
- Help reduce fire hazard potential around the community of Green's Peak Hideaways.
- Complete restoration treatment within an important sub unit of a landscape level restoration effort across GMU 1.

PROJECT STRATEGIES:

The project area will be treated utilizing three treatment methods based on vegetative condition.

Dense stands with merchantable timber; will be treated by a contractor and timber utilized for products. The Forest Service will pay $100,000 to treat 226 acres in the project area.

Dense stands with un-merchantable timber; will be treated by a contractor and cutting all 12" and smaller trees, machine piling for burning at a later date.

Areas with low tree density; will be treated utilizing Forest Service hand crews with chainsaws. This has been determined to be the most economical method for low density areas. Ponderosa pine trees will be lopped and scatted in place.

PROJECT LOCATION:
The project area is located in critical winter range/transition zone habitat on the Apache Sitgreaves National Forest, Springerville Ranger District (**see attached map**).

LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):
Public Lands administered by the US Forest Service, Springerville Ranger District.

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

HABITAT DESCRIPTION:
The project area is located at approximately 7,500-8,000 feet elevation in great basin grassland mixed with pinyon-juniper and occasional stringer ponderosa pine stands.

ITEMIZED USE OF FUNDS:

Match Funds:
Forest Service will fund a contractor to treatment 226 acres of dense pine stands in transition winter range with an expected completion date of 4/2008. Merchantable material will be utilized and slash removed.

Cost: $442/acre x 226 acres = $100,000

SBG Funds Requested:
Funds are being requested to complete two treatment methods. Funding of both treatments is preferred but if only partial funding is available complete funding of one treatment method will complete those acres in that treatment method.

-Contractor Mechanical Treatment
Treatment Unit 3 consists of high density un-merchantable pine trees that have encroached into grassland habitat. Because of the high density of trees the use of heavy equipment to cut and pile the trees (which will be burned at a later date) is required for this treatment unit. The cost for this mechanical treatment is expected to be no more that $350/acre. Because heavy equipment will be used an archeologist survey and clearance report will be required in this 166 acre treatment unit and is estimated to cost $4,000.

Cost: Contractor mechanical treatment $350/acre x 166 acres = $58,100
Mandatory Archeologist survey required in Unit 3 = $ 4,000
Total Unit 3 cost $ 62,100

-Hand Crew Chainsaw Thinning
Treatments in Unit 1, 2, 4, 5, 6, 7, 8, 9 (137 acres total) consists of low to moderate density un-merchantable pine trees that have encroached into grassland habitat. The most efficient and economical method of treatment for these units is utilizing FS Fire Fighter Crews during the non-fire season to hand thin encroaching trees with chainsaws. Because no heavy equipment will be used in these treatment units no archeologist survey is required. The cost for these treatment units is expected to be no more than $150/acre.

Cost: FS Fire Crew chainsaw thinning $150/acre x 137 acres = $20,550
Total Unit 1,2,4,5,6,7,8,9 cost $20,550

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

1) US Forest Service: Matching funding, administration, analysis.
2) Springerville HPC: Potential volunteer work days.
3) Over the last five years the Springerville Ranger District, in cooperation with Arizona Game and Fish, Springerville HPC, Rocky Mountain Elk Foundation, Antelope Foundation, Arizona Deer Association, Eastern Arizona Counties RAC, and volunteers have teamed up to improve over 3600 acres of winter range habitat.
4) Eastern Arizona Counties RAC has given us 2 grants at $50,000 each, over the last two years to help with the restoration of winter range habitat.

PROJECT MONITORING PLAN:
A multiparty monitoring plan is being developed and is required by Public Law 106-291 H.R. 4578 Sec. 338. Once the multiparty monitoring team is established they will develop a monitoring plan that will include project proposal needs.

PROJECT MAINTENANCE:
The Springerville Ranger District is planning to utilize periodic prescribed fire to maintain the open conditions. Prescribed burning will also help to recycle nutrients, remove excess woody material buildup, and reinvigorate remaining browse plants in the project area.

PROJECT COMPLETION REPORT TO BE FILED BY:
Springerville Ranger District.

WATER DEVELOPMENT PROJECTS (see attached worksheet):

TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (see attached worksheet):

ARIZONA GAME AND FISH DEPARTMENT
TREE SHEARING WORKSHEET

PROJECT NAME: __Atascacita Spring Grassland Restoration Treatment____

1) What is the estimated acreage of the project? Total project area; 529 acres.
226 acres FS funded in 08 utilizing contractor
166 acres funding requested for contractor
137 acres funding requested for FS thinning crew

2) How are the trees going to be cleared? (agra axe, chain saw, push):
226 acres contractor with feller/buncher equipment
166 acres contractor using "Three Wheeled Hot Saw"
137 acres using hand crews with chain saws

3) What is the estimated number of trees per acre?
The 226 acre unit has approximately 400 trees/acre.
The 166 acre unit has approximately 360 trees/acre.
The 137 acre unit has approximately 80 trees/acre.

4) Describe trees to be cleared (species, estimated diameter, single stem, multi-stem):

Trees to be removed will include all ponderosa pine trees less than 16 inches dbh.

5) Describe terrain (slope, soil type, rocks, etc.)

Terrain in flat blue gramma grassland with some rock outcrops.

6) Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.

N/A

7) Please provide the following information about access to the proposed site:
Type of access (mark one): __X_2x4 vehicles ___4x4 only ___foot only**
**If foot access only: Distance in miles: Approx. hiking time:

Does access to this site require crossing private or tribal lands? ___YES __X_NO

Is the site relatively accessible for tree shearing equipment? ___X__YES ___NO

Please describe any restrictions to public access: **No restriction to public access.**