

FOREST STEWARDSHIP PLAN

for

STEPHEN SHERMAN
921 Dixon Road
Boulder, CO 80302
(303) 444-0622 (H)
~~(303) 924-4422 (O)~~
~~(303) 924-7523 (F)~~

774-5145

N1/2 NW1/4 NE1/4 NE1/4, Sec 14, T1N, R72W, S.P.M.

(5.0 Acres)

Prepared By:

Douglas J. Stevenson
Colorado State Forest Service
936 Lefthand Canyon
Boulder, CO 80302
(303) 442-0428 (O)
(303) 448-1283 (F)

January 22, 1998

This management plan has been prepared at my request to guide my Stewardship management activities which I voluntarily apply on my property. I believe that activities recommended in this plan are appropriate to meet my objectives and will benefit the natural resources on my property. I intend to apply the recommended practices and to maintain them for a period of at least ten years, thus helping me to be a good steward of the forest and associated resources entrusted to me on my property.

Stephen Sherman

January 22, 1998

TABLE OF CONTENTS

Subject	Page
STEWARDSHIP INCENTIVES PLAN	1
TABLE OF CONTENTS	2
OBJECTIVE	3
DESCRIPTION	3
Peyton very gravelly loamy sand	3
WILDLIFE	5
PLANTING PROJECTS	5
Planting A	5
Thicket Plantings	6
Northwest (Currant) Thicket B	7
Pine Thicket C	7
MAINTENANCE	8
MAP	10

OBJECTIVE

To create a windbreak to protect the house. To create wildlife shelters and food sources and to improve the aesthetic qualities of the yard.

DESCRIPTION

The property is located on Dixon Road, 0.9 miles southwest of Gold Hill. The lot is mostly covered with grass, except for annual weeds near the house and twenty or so ponderosa pines in the northwest corner.

The site is currently occupied by a house in the east-central part of the lot. An intermittent drainage runs north-south along the east property line.

Peyton Soil Series¹

The Peyton series is made up of deep, well-drained soils. These soils formed on upland hills and valley side slopes in weathered loamy and sandy material that has been locally transported. Slopes are 5 to 20 percent. Elevations are from 5,800 to 7,500 feet. The vegetation is mainly tall grasses and, in places, ponderosa pine. Annual precipitation is 18 to 24 inches. Mean annual air temperature is 44° to 48° F., and the frost-free season is about 80 to 120 days.

In a representative profile the surface layer is dark-gray very gravelly loamy sand about 11 inches thick. The subsoil, about 32 inches thick, is brown gravelly sandy clay loam that grades to gravelly coarse sandy loam. The substratum extending to a depth of 60 inches or more is pale-brown gravelly sandy loam. Soil reaction is neutral.

Peyton soils have moderate permeability. Available water capacity for the profile is moderate. Roots can penetrate to a depth of 40 to 60 inches or more.

These soils are used for pasture and homesites.

Representative profile of Peyton very gravelly loamy sand in an area of Peyton-Juget very gravelly loamy sands, 5 to 20 percent slopes, is located 1,640 feet north and 100 feet east of

¹Moreland, Donald E. and Moreland, Ronald C. Soil Survey of Boulder County Area, Colorado, USDA - Soil Conservation Service, Denver, 1975.

southwest corner of sec. 11, T. 1 N., R. 71 W.:

- A1 - 0 to 11 inches, dark-gray (10YR 4/1) very gravelly loamy sand, very dark brown (10YR 2/2) when moist; weak, fine, granular structure; slightly hard, very friable; neutral; clear, smooth boundary.
- B1t - 11 to 16 inches, brown (10YR 5/3) gravelly sandy clay loam, dark brown (10YR 3/3) when moist; weak, medium, subangular blocky structure; hard, very friable; thin, patchy clay films on ped faces; neutral; clear, smooth boundary.
- B2t - 16 to 30 inches, brown (10YR 5/3) gravelly sandy clay loam, brown (10YR 4/3) when moist; moderate, medium subangular blocky structure; very hard, friable; thin, nearly continuous clay films on ped faces; neutral; clear, smooth boundary.
- B3t - 30 to 43 inches, brown (10YR 5/3) gravelly coarse sandy loam, brown (10YR 4/3) when moist; weak, medium and coarse subangular blocky structure; hard, friable; thin, patchy clay films on ped faces; neutral; gradual, smooth boundary.
- C - 43 to 60 inches, pale-brown (10YR 6/3) gravelly sandy loam, brown (10YR 5/3) when moist; massive; very hard, friable; neutral.

The A horizon ranges from 6 to 12 inches in thickness and from heavy loamy sand to sandy loam in texture. Structure of the B2 horizon ranges from weak and moderate subangular blocky to weak prismatic. The C horizon ranges from sandy loam to loamy sand in texture. Amount of coarse fragments in the soil ranges from 10 to 25 percent, although in places the surface layer contains up to 60 percent coarse fragments.

Peyton-Juget very gravelly loamy sands, 5 to 20 percent slopes (PgE). - This complex is on the uplands.... These are open park-like areas mainly more than 20 acres in size. This complex consists of about 65 percent Peyton very gravelly loamy sand and about 20% Juget very gravelly loamy sand. Peyton very gravelly loamy sand is in the main part of the area. Juget very gravelly loamy sand is on the edges of the area and on narrow ridges extending into the areas. The Peyton soil has the profile described as representative of the Peyton series. The Juget soil has a profile much like that described as representative of the Juget series, but the surface layer is very gravelly loamy sand.

Included with this complex in mapping are small areas of rock outcrop and a few small areas of Allens Park soils. Also included along some drainageways are areas of a deep, dark-colored soil formed in alluvium. A few small areas around lakes or ditches have a seasonal high water table. The included soils make up about 15% of each mapped area.

Runoff is slow to medium on this complex. The erosion hazard is moderate to high. Tillage of most areas is limited by the amount of gravel.

All the acreage of this complex is used for pasture, recreational uses and wildlife habitat. Some areas are used for homesites. (Capability unit VIIs-1, nonirrigated; tree suitability group 2)

WILDLIFE

Though not a primary purpose, wildlife use of the property is an important secondary purpose of these plantings. Small game and non-game birds are desired.

PLANTING PROJECTS

WINDBREAK:

Planting A:

Purpose: To protect the house and yard from westerly winds, especially during the winter.

Description: This is a three-row planting. It is 469 feet long, 16 feet wide (36 feet with buffers), occupies 0.5 acres and benefits 4.3 acres. This component runs along the west property line, bending eastward 141 feet from the north end so as to avoid some dwarf-mistletoe-infected ponderosa pines. At 320 feet from the house, it will not become an effective barrier until the pines reach a height of 16 feet in about 25 years. At thirty years when it is reaching "optimum" height for a wind-break, it will be about 30 feet tall and produce a 10% reduction in wind force. It would be more effective if located closer to the house.

The outer row will require 117 shrubs (Woods rose or golden currant) on a four-foot spacing. These shrubs should be of a single species, but species could change at the bend if variety is desired.

The middle row will require 78 medium-sized trees on a six-foot spacing. Caragana (Siberian pea-tree) will grow well on this site, but loses its leaves in the winter. Rocky Mountain juniper would work if it can be successfully established; this will require protection from winter winds (eg. a snow fence positioned so as to place the snow drift on top of the planting to protect seed-

lings and provide extra water) for the first three-to-five years. Again, this row should consist of a single species, but for variety they could change at the bend.

The inside row will require 59 tall-growing trees on an eight-foot spacing. Ponderosa pine is about the only species that could prosper on this site.

This planting will require 1407 feet of weed barrier weed barrier (6-foot width minimum, 8-foot width preferred) and 1500 6-inch, 11-gauge wire staples (Square ends are easier to place.).

Cost summary for Planting A:

Seedlings:

150 shrubs @ \$21.50/50:	\$ 64.50
90 Rocky Mtn. junipers @ \$28.80/30:	86.40
<u>60 ponderosa pines @ \$28.80/30:</u>	<u>57.60</u>
300 Sub-Total:	\$ 208.50
Bulk Discount (0%):	0.00
SEEDLING TOTAL:	\$ 208.50
Sales Tax (4.15%):	8.65
TOTAL, SEEDLINGS:	\$ 217.15

Materials:

1500 Staples @ \$54.00/1000:	\$ 81.00
1407' Weed Barrier @ \$108.00/300':	<u>506.52</u>
Sub-Total:	\$ 587.52
Sales Tax (6.9%):	<u>40.54</u>
TOTAL, MATERIALS:	\$ 628.06

Labor:

254 Seedlings planting @ \$2.00 ea.:	\$ 508.00
469 Yards weed barrier @ \$1.08/yd.:	<u>506.52</u>
TOTAL, LABOR:	\$1014.52

GRAND TOTAL*	\$1859.73
--------------	-----------

Thicket Plantings:

Purpose:

To provide cover and a food source for non-game wildlife.

Description: There will be two thickets: a shrub thicket in the northwest corner of the property, between the windbreak and the existing ponderosa pines. This thicket is more-or-less triangular with some irregularities needed to fit around the pines. It extends 141 feet along the property line from either corner. The diagonal is 200 feet long.

STEWARDSHIP INCENTIVES PLAN

7

The northwest planting will be a golden currant thicket, containing 272 seedlings on a 4'X4' spacing. It will require 4800 square feet of weed barrier (2.67 6'X300' rolls) and 900 6" staples.

The other planting will be a ponderosa pine "thicket," containing 68 seedlings on an 8'X8' spacing. It will be a single-row planting along the east side of the wind-break, with ten trees forming a partial second row extending southward from the bend. It will also require 4800 square feet of weed barrier and 900 6" staples.

Costs are shown for each thicket separately:

Northwest (Currant) Thicket B:

Seedlings:

300 golden currants @ \$21.50/50:	\$ 129.00
Sales Tax (4.15%):	<u>5.35</u>
TOTAL, SEEDLINGS:	\$ 134.35

Materials:

900 Staples @ \$54.00/1000:	\$ 48.60
800' Weed Barrier @ \$108.00/300':	<u>288.00</u>
Sub-Total:	\$ 336.60
Sales Tax (6.9%):	<u>23.23</u>
TOTAL, MATERIALS:	\$ 359.83

Labor:

272 Seedlings Planting @ \$2.00 ea.:	\$ 544.00
266 Yards weed barrier @ \$1.08 ea.:	<u>287.28</u>
TOTAL, LABOR:	\$ 831.28

GRAND TOTAL*

\$1325.46

Pine "Thicket" C:

Seedlings:

90 ponderosa pines @ \$28.80/30:	\$ 86.40
Sales Tax (4.15%):	<u>3.59</u>
TOTAL, SEEDLINGS:	\$ 89.99

Materials:

900 Staples @ \$54.00/1000:	\$ 48.60
800' Weed Barrier @ \$108.00/300':	<u>288.00</u>
Sub-Total:	\$ 336.60
Sales Tax (6.9%):	<u>23.23</u>
TOTAL, MATERIALS:	\$ 359.83

STEWARDSHIP INCENTIVES PLAN

8

Labor:

68 Seedlings Planting @ \$2.00 ea.:	\$ 136.00
266 Yards weed barrier @ \$1.08 ea.:	<u>287.28</u>
TOTAL, LABOR:	\$ 423.28

GRAND TOTAL* \$ 873.10

*Based on 1998 prices. Prices are approximate and subject to change. Bulk rates are available if you do several projects at once and order enough (1000) trees. If two or three projects are done at the same time, the leftovers from each can be consolidated and the order reduced slightly.

MAINTENANCE

The use of weed barrier just about eliminates the need for maintenance, if it can be placed by mid-June (preferably June 1st). The only thing needed is an occasional inspection tour to re-anchor weed barrier that comes loose. Watering will increase survival and growth, but it is not needed.

You can expect about 15% loss during the first year a planting is in the ground. One year after planting, seedlings usually look terrible, but are recovering from shock by the end of the third year. Rabbit guards may be needed to protect the seedlings from our furry friends. By the third year, transplant losses should no longer be a problem. A seedling is considered established after surviving five years.

The wall-to-wall weed barrier approach will minimize grasshopper problems, but to be sure, you should mow the grass and weeds around the plantings during the early part of each season. After mid-July, quit mowing so that weeds can come up and provide some protection from winter winds.

I strongly recommend a plastic snow-fence be installed along the property line so that snow drifts over and buries the planting. This protects it from freezing damage and provides extra water when the snow melts.

Grass is a vigorous competitor with tree seedlings. It drinks up water and adds compounds to soil to poison competition. Seedlings grow much better if they don't have to fight it.

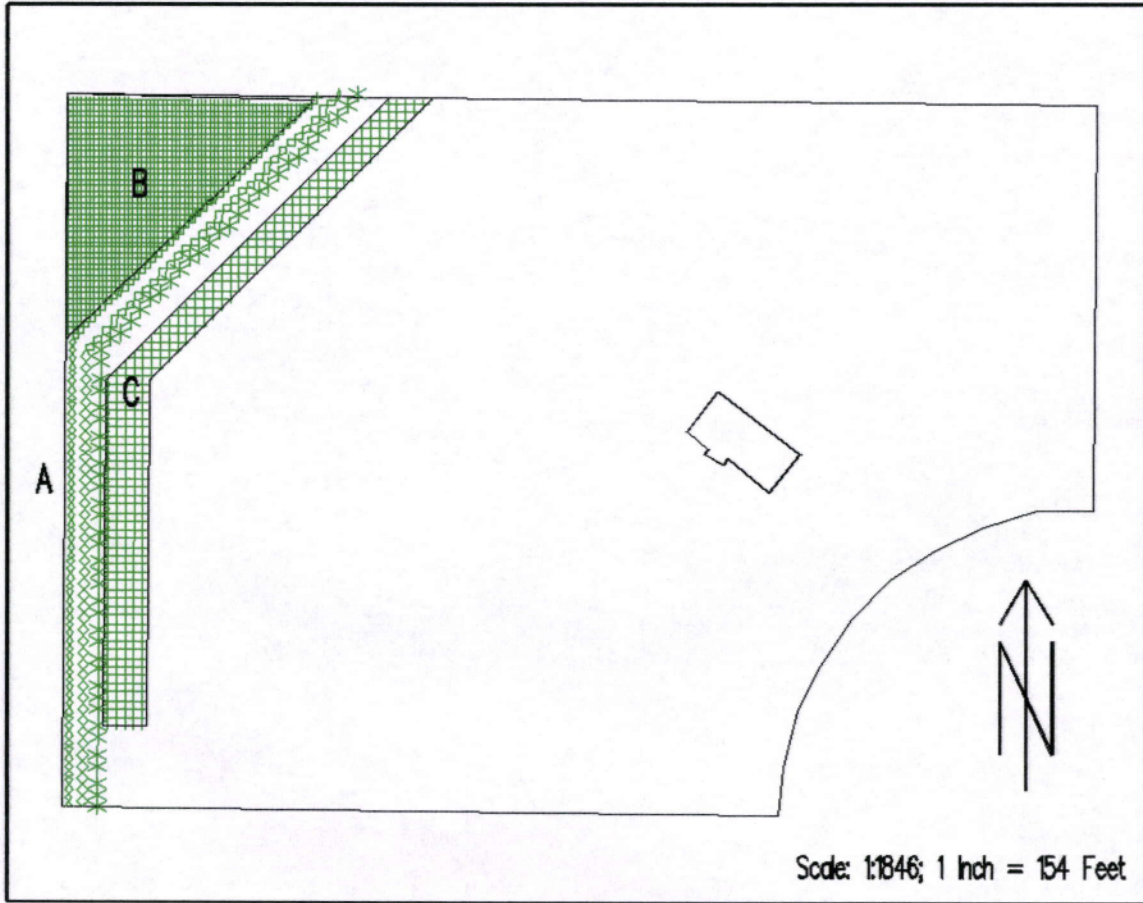
Weed barrier is a woven plastic cloth. It kills grass. Laid around tree seedlings, it provides needed relief from competition.

Maintenance is the landowner's responsibility. The above prices do not include things like re-anchoring weed barrier after a

storm, or watering seedlings should drought threaten the planting during the first summer (Although, this can be arranged.).

Respectfully Submitted By:

Douglas J. Stevenson
Assistant District Forester



Stephen Sherman

N1/2 NW1/4 NE1/4 NE1/4, Sec 14, T1N, R72W, S.P.M.

- | | | | |
|----|---------------|-----------|---------------|
| — | Property Line | —*—*—*—* | Shrubs |
| == | Road | —◇—◇—◇—◇— | Junipers |
| □ | House | —*—*—*—* | Trees |
| | | ■ | Shrub Thicket |
| | | ■ | Pine Thicket |

Drawn By: Douglas J. Stevenson

January 22, 1998