

STEWARDSHIP INCENTIVES PLAN

for

BECKY BERTOLIN
12671 St. Vrain Road
Longmont, CO 80501
(303) 776-2508 (H)

SE1/2 SE1/4 SE1/4 SE1/4, Sec 36, T3N, R69W, 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 9, 1997

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.

Becky Bertolin

January 9, 1997

TABLE OF CONTENTS

Subject	Page
COOPERATIVE FOREST MANAGEMENT PLANTING PLAN	1
TABLE OF CONTENTS	2
OBJECTIVE	3
DESCRIPTION	3
WILDLIFE	3
PLANTING PROJECTS	3
Windbreak A	3
Windbreak B	5
Thicket Plantings	6
Northeast (Plum, or sand-cherry) Thicket C	6
Southwest (Pine) Thicket (D)	7
MAINTENANCE	8
MAP	9

OBJECTIVE

To create a windbreak to protect the house and visual screens to block the view from nearby houses to the north and west. To create wildlife shelters and food sources and to improve the aesthetic qualities of the yard.

DESCRIPTION

The property is located on the northwest corner of St. Vrain Road and Weld County Road 1.

The site is currently occupied by a house and shed in the south-center part of the lot and by a restored barn in the northeast corner. The areas being considered for planting are currently in stubble after having been farmed for wheat in 1996. The site is level. It is located on Broadway alluvium, a gravel deposit of late Pleistocene (Pinedale) age. There are a few trees and lawn near the house and buildings.

The soil is Weld loam, a deep soil with good water-holding capacity which has no restrictions for tree growing, except for a shortage of water which can be readily remedied with weed barrier, making irrigation unnecessary.

WILDLIFE

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

PLANTING PROJECTS

WINDBREAK:

Planting A:

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

Description: This is a three-row planting. It is 428 feet long, 16 feet wide (36 feet with buffers), occupies 0.4 acres and benefits 3.9 acres. This component runs from the north side of St. Vrain Road on the south to the north line, along the west side of the property.

north. It is well-situated to protect from westerly

winds and long enough to give some protection from northwest winds, as well. A gap could even be left between this and Planting B to reduce costs, but then Planting B wouldn't be protecting anything and wouldn't be a cost-sharable windbreak.

The outer row will require 107 shrubs on a four-foot spacing. Workable species include American plums, cottonasters, lilacs, three-leaf sumacs, Nanking cherries, and caraganas. These shrubs should be of a single species (Different species could be used in the north vs. south halves, but species should not be mixed any more than necessary.

The middle row will require 71 medium-sized trees on a six-foot spacing. Workable species include Rocky Mountain juniper and eastern red-cedar for year-round protection, and caragana, and Russian-olive for summer only protection. Again, this row should consist of a single species.

The inside row will require 53 tall-growing trees on an eight-foot spacing. Suitable species include ponderosa pine, Siberian or Chinese elms, or eastern or plains cottonwoods. Again, the row should consist of a single species.

At least one of the three rows needs to be a conifer to provide winter protection.

This component will also require 1284 linear feet of weed barrier (6-foot width minimum, 8-foot width preferred) and 1400 6-inch, 11-gauge wire staples (Square ends are easier to place.).

Cost summary for Planting A:

Seedlings:

107 shrubs @ \$21.00/50:	\$ 44.94
71 Rocky Mtn. junipers @ \$28.20/30:	66.74
<u>53</u> ponderosa pines @ \$28.20/30:	<u>49.82</u>
231 Sub-Total:	\$ 161.50
Bulk Discount (0%):	<u>0.00</u>
SEEDLING TOTAL:	\$ 161.50
Sales Tax (4.15%):	<u>6.70</u>
TOTAL, SEEDLINGS:	\$ 168.20

STEWARDSHIP INCENTIVES PLAN

5

Materials:	
1400 Staples @ \$54.00/1000:	\$ 75.60
1284' Weed Barrier @ \$108.00/300':	<u>462.24</u>
Sub-Total:	\$ 537.84
Sales Tax (6.9%):	<u>37.11</u>
TOTAL, MATERIALS:	\$ 574.95
Labor:	
231 Seedlings planting @ \$2.00 ea.:	\$ 462.00
428 Yards weed barrier @ \$1.08/yd.:	<u>462.24</u>
TOTAL, LABOR:	\$ 259.60
GRAND TOTAL*	\$1667.39

Planting B:

Purpose: To protect the northwester corner of the lot from wind and to provide a visual barrier to a planned subdivision.

Description: This is a three-row planting. It is 273 feet long, 16 feet wide (36 feet with buffers), occupies 0.2 acres and benefits 2.5 acres. This component runs from the northwest corner of the lot to a point north of the northwest corner of the barn, along the north property line.

The outer row will require 68 shrubs on a four-foot spacing. Workable species include American plums, cottonasters, lilacs, three-leaf sumacs, Nanking cherries, and caraganas. These shrubs should be of a single species.

The middle row will require 45 medium-sized trees on a six-foot spacing. Workable species include Rocky Mountain juniper and eastern red-cedar for year-round protection, and caragana, and Russian-olive for summer only protection. Again, this row should consist of a single species.

The inside row will require 34 tall-growing trees on an eight-foot spacing. Suitable species include ponderosa pine, Siberian or Chinese elms, or eastern or plains cottonwoods. Again, the row should consist of a single species.

At least one of the three rows needs to be a conifer to provide winter protection. This component requires the northwest end of Planting A to be effective. It will not provide wind protection without it and is not eligible

for cost-sharing unless Planting A extends all the way to the north line.

This component will also require 819 feet of weed barrier (6-foot width minimum, 8-foot width preferred) and 900 6-inch, 11-gauge wire staples (Square ends are easier to place.).

Cost summary for Planting B:

Seedlings:	
68 shrubs @ \$21.00/50:	\$ 28.56
45 Rocky Mtn. junipers @ \$28.20/30:	42.30
<u>34</u> ponderosa pines @ \$28.20/30:	<u>31.96</u>
147 Sub-Total:	\$ 102.82
Bulk Discount (0%):	<u>0.00</u>
SEEDLING TOTAL:	\$ 102.82
Sales Tax (4.15%):	<u>4.27</u>
TOTAL, SEEDLINGS:	\$ 107.09
Materials:	
900 Staples @ \$54.00/1000:	\$ 48.60
819' Weed Barrier @ \$108.00/300':	<u>294.84</u>
Sub-Total:	\$ 343.44
Sales Tax (6.9%):	<u>23.70</u>
TOTAL, MATERIALS:	\$ 367.14
Labor:	
147 Seedlings planting @ \$2.00 ea.:	\$ 294.00
273 Yards weed barrier @ \$1.08/yd.:	<u>294.84</u>
TOTAL, LABOR:	\$ 588.84
GRAND TOTAL*	\$1063.06

Thicket Plantings:

Purpose:

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

Description: There will be two thickets: one in the northwest corner of the windbreak and one along St. Vrain Road in the southwest corner of the property. The north one is triangular in shape and extends 93 feet along the roads; it is 135 feet along the diagonal.

The northwest planting will be an American plum thicket (or sand-cherry, if a food species is preferred), 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.

STEWARDSHIP INCENTIVES PLAN

7

The southwest planting will be a ponderosa pine thicket, containing 68 seedlings on an 8'X8' spacing. It will be a rectangle. It will also require 4800 square feet of weed barrier and 900 6" staples.

Costs are shown for each thicket separately:

Northwest (Plum or sand-cherry) Thicket (C):

Seedlings:

272 American plums @ \$21.00/50:	\$ 114.24
Sales Tax (4.15%):	<u>4.74</u>
TOTAL, SEEDLINGS:	\$ 118.98

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*

\$1310.09

Southwest (Pine) Thicket (D):

Seedlings:

68 ponderosa pines @ \$28.20/30:	\$ 63.92
Sales Tax (4.15%):	<u>2.65</u>
TOTAL, SEEDLINGS:	\$ 66.57

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:

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*

\$ 849.68

*Based on 1996 prices. Prices are approximate and subject to change. Bulk rates are available if you do several

projects at once and order enough 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.

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.

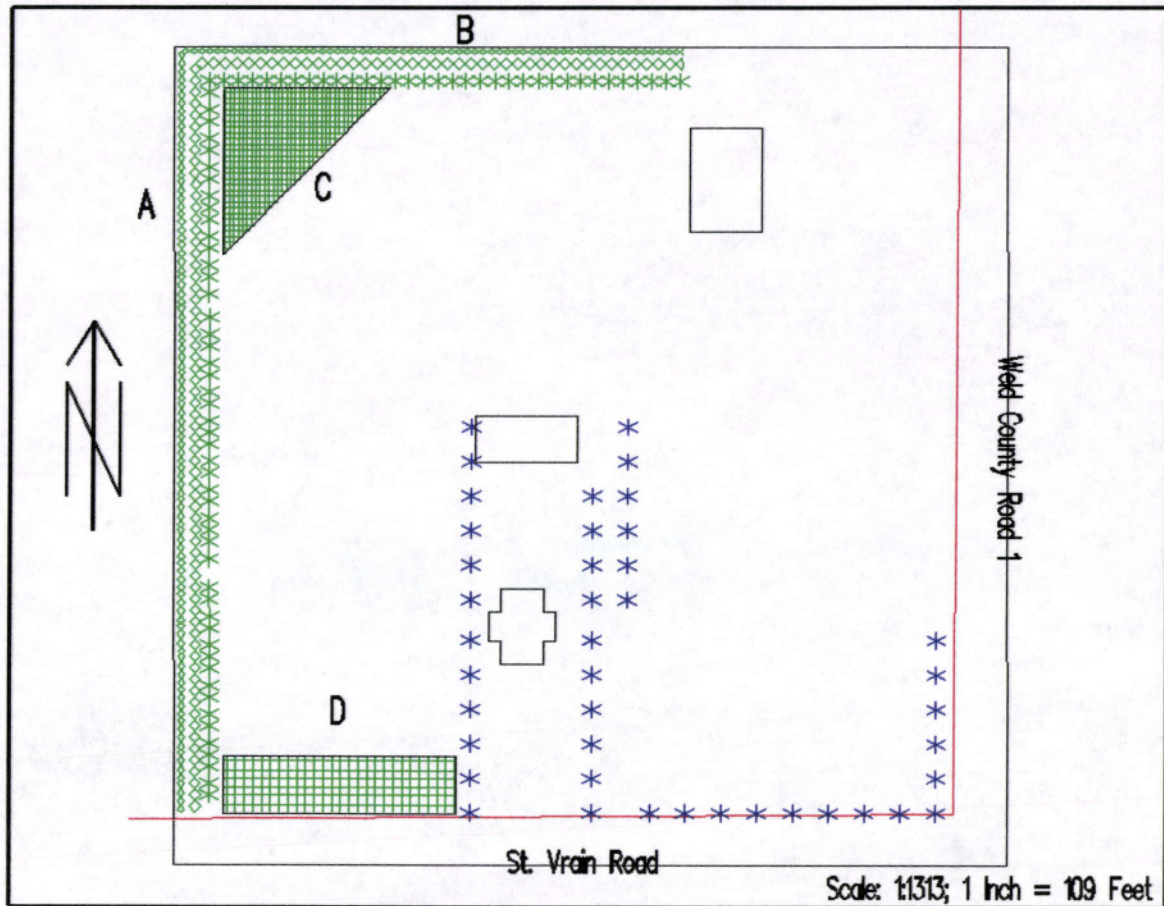
Weed barrier is a woven plastic cloth. It kills grass. Laid around tree seedlings, it provides needed relief from competition.

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



Becky Bertolin

SE1/2 SE1/4 SE1/4 SE1/4, Sec 36, T3N, R69W, S.P.M.

- | | | | |
|----|---------------|-------|--------------|
| — | Property Line | ~~~~~ | Shrubs |
| == | Road | ◇◇◇◇◇ | Junipers |
| □ | Building | * * | Trees |
| | | ■ | Plum Thicket |
| | | ▤ | Pine Thicket |

Drawn By: Douglas J. Stevenson on PC ARC/INFO

January 9, 1997