

2B. Habitat Improvement (40 pts)

A producer wants to improve wildlife habitat on his farm for Greater Northern Sage Grouse, a Nevada wildlife specie of concern. The producer applied for assistance through the WHIP (Wildlife Habitat Incentive Program) program which offers 50% to 75% cost share to landowners who are willing to improve wildlife habitat on their farms. The plan includes 7,400 feet in fencing to prevent cows from grazing the project area. A 25 acre area dominated by annual grasses and weeds will be sprayed with Roundup followed by planting of a wildlife seed mix. A separate 45.9 acre pasture will be tilled and then seeded to a mixture of grasses and legumes. Once established, it will be harvested once each year and then allowed to regrow for fall and winter feed and cover. A watering trough will be installed and connected to an existing pipeline. This will require 450 ft of additional piping. The watering trough will have a wildlife escape ramp and the overflow will return to overland flow making water available to upland game birds. Costs for each of the components of this project are as follows:

Fencing: \$3.20/ft

Spraying Roundup: \$20/acre

Wildlife Seed Mix: \$65/acre

Seed Bed Prep/tillage (for pasture only): \$51.44/acre

Drilling Grass and Legume Seed Mix: \$25.00/acre (Includes seed)

Pipeline: \$3.00/ft

Watering Trough with escape ramp: \$950/each

Calculate the cost of this habitat improvement.

Show Calculations:



2B. Habitat Improvement (40 pts)

A scenario will be given to improve habitat and may include fencing installment, forage planting, water improvement, etc. This will require a calculation for total cost of improvement based on inputs and requirements.

Show Calculations:

7 sections @ 5 pts each = 35

Right Answer → 5pts 40

~~Fencing~~
 $7460 \text{ ac} \times \$3.20 \text{ ft} = \$23,680 \text{ 5pts}$

Spraying & Seeding 25 ac pasture

$$(25 \text{ ac} \times \underset{500}{\$20 \text{ ac}}) + (25 \text{ ac} \times \underset{1625}{\$65 \text{ ac}}) = \underset{5pts}{\$500} + \underset{5pts}{\$1625} = \$2,125$$

~~Spraying &~~
Tilling & Seeding 45.9 ac pasture

$$(45.9 \text{ ac} \times 51.44) + (45.9 \text{ ac} \times 25) = \underset{5pts}{\$2,361.10} + \underset{5pts}{\$1,147.5} = \$3,508.60$$

Water Trough

$$(450 \text{ ft} \times 3) + 950 = \underset{5pts}{\$1,350} + \underset{5pts}{\$950} = \$2,300$$

Totals
 $\$23,680 + \$2,125 + \$3,508.60 + \$2,300 = \$31,613.60 \text{ 5pts}$

