

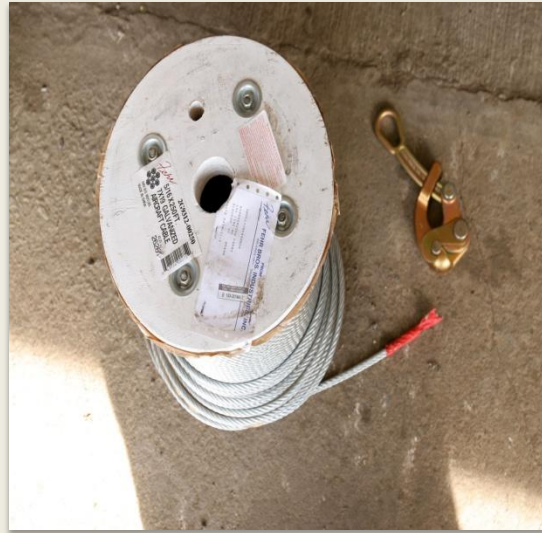
Borderview Research Farm



Inventory of
items to
construct a
hopyard



Cedar and Tamarack poles 20 to 22 ft X 6 in.
65 @\$32.00 each



Haven Grip for
 $\frac{1}{4}$ to $\frac{1}{2}$ inch cable
2 @\$82.50

5/16 Aircraft Cable
6750 ft. @ \$.26 Cents a
Foot

Cable Cutters
\$66.00



$\frac{3}{4}$ X 12 inch Turn Buckle

37 @\$15.95 Each



5/16 Cable Clamps

300 @\$.64 Cents Each



5 inch X 48 inch

Ground Anchors

40 @\$13.00 Each

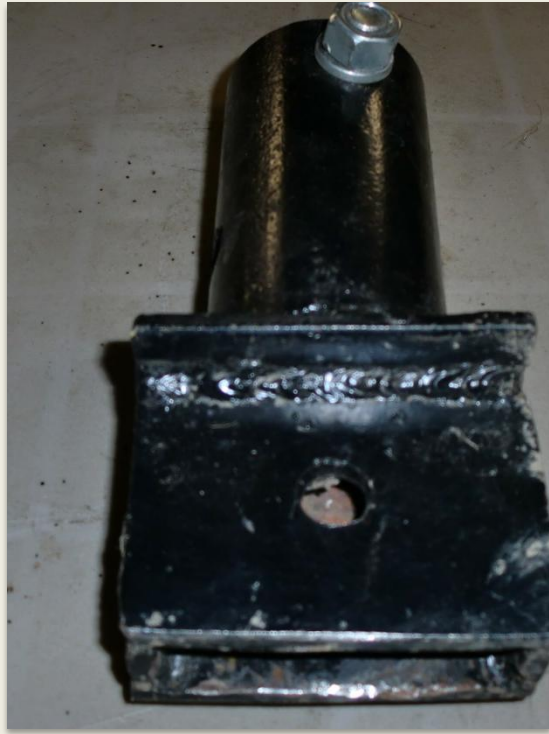
5/16 X 3 in. Eye bolts



Come Along



18 Volt Impact Wrench



Home made adapter for screwing in ground anchors that mounts to post hole digger.



Adapter sets over head of ground anchor.



Commercial post hole digger.
\$339.00 for the weekend.



3 Point Hitch Post Hole Digger With Anchor Attachment



Loader for moving poles.



Ten yards stone for setting poles.



Home made lift bucket.
Made from a 250 gallon tote
holder



Welded to an old front end loader
bucket



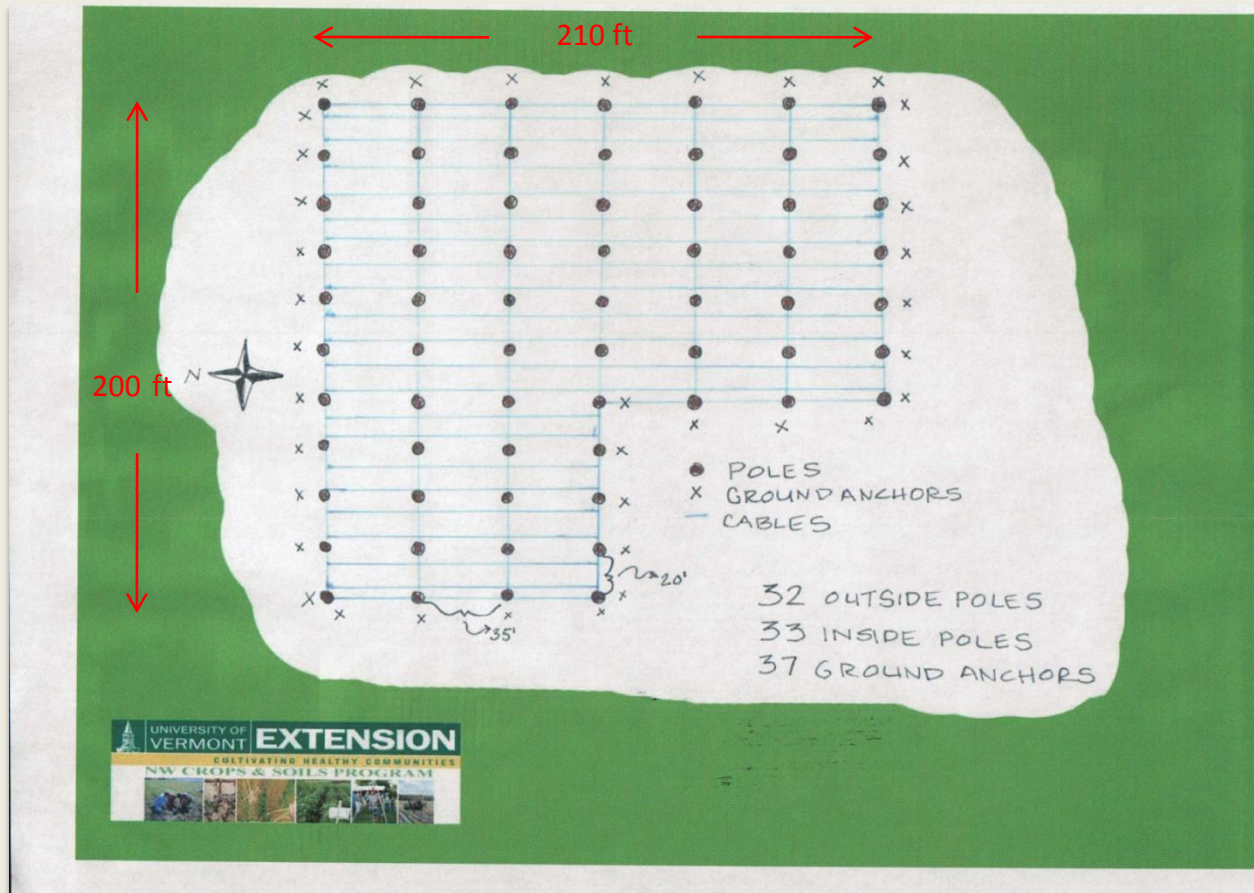
Washington State



Hops



Yards



Hopyard Layout



Hopyard Layout. Poles are spaced 20 ft. X 35 ft.



Lay out flags for post location



Screwing in eye bolts



Make sure to do some test holes to see if you can dig deep enough



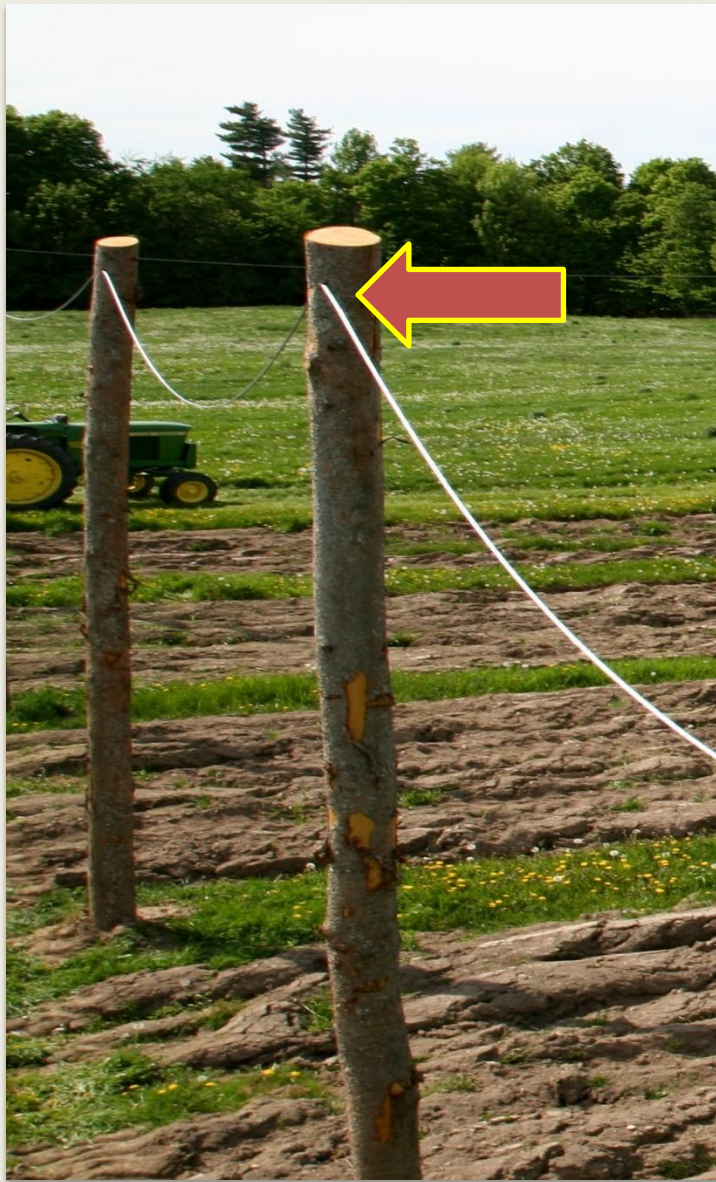
Drilling 4 Feet Deep to avoid Frost



Setting Poles



Setting Outside Poles



Drilled holes in end poles.



Cabling Hopyard
Cable Spool On Tractor 3 Pt Hitch



Eye hook for mounting Haven Grip for pulling cable



Using a Haven Grip



Hooking cable to haven grip to pull cable.



Painted turn buckles to make them more visible in field.



Painted turn buckles.



Finished Hops Trellis

Hopyard Construction Cost

| | |
|-----------------------------------|------------------|
| 6750 Ft. 5/16 cable | \$1850.00 |
| 65 Poles | \$2098.00 |
| 37 Turn Buckles | \$589.00 |
| 40 Ground Anchors | \$560.00 |
| 2 Haven Grips Cable Pullers | \$165.00 |
| Cable Cutters | \$66.00 |
| 300 Cable Clamps | \$197.00 |
| 10 Yards Stone | \$460.00 |
| Total Material Cost | \$5996.00 |
| Post Hole Digger Rental | \$339.00 |
| 65 Man Hours and 48 Tractor Hours | |



Late



Summer



Enjoying The Fruits of Our Labor