

Full Overhead Bird Netting

Best Option for total Exclusion of Birds in your vineyard or orchard.

Bob Thaden
Tongue River Vineyard & Winery
Miles City, MT
May 2, 2015
www.tongueriverwinery.com
406-853-1028

Protection From Critters: Netting



Notice the tall posts every single row, ideally no more than 50 feet apart.

- There is nothing more beautiful than a vineyard or shrub-orchard covered with birdnetting...a quiet, bird-free sanctuary where you are free to prune, sample, train, harvest without removing nets!

4/21/2015

2

OUR VINEYARD

Our nets are 260 feet long (over a 250 ft long vineyard), 50 foot wide sections snapped together with C-Clips.



4/21/2015

3

Basic Overhead Netting Plan

- Full ceiling of netting
- 4 side walls of netting
- 30' or 50' wide sections
- Wire runs THROUGH the selvedge stitches on the sides.
- Wire runs UNDER the intermediary rows.
- Sections clipped together.

www.smart-net-systems.com
250-890-0841 Canada

You'll need 9-10 foot posts.
C-Clips (1000/bag)
Wire (I used Duraline plastic 12.5 gauge wire (\$250/7000 ft)
½" Bolts, nuts and washers to fasten netting posts to trellis posts.
Something to weigh down the side curtains along the ground. (Old posts, iron pipe, 1" poly pipe full of water, rebar staked down, etc.)

4/21/2015

4

Smart Net Price & Dimensions



530 Kinnikinnik Way, Comox, BC, Canada V9M 3V8
Office 250-890-0841 Fax 250-339-3397
www.smartnetsystems.com email smartnetsystems@gmail.com

2015 OVERHEAD NETTING PRICE LIST - USD

| 530 FEET – 162 METERS | | WEIGHT IN LBS | PRICE IN USD |
|-----------------------|---------------|---------------|--------------|
| 50' (15.24M) | X 530' (162M) | 95.5 | 927.50 |
| 40' (12.2M) | X 530' (162M) | 76.3 | 742.00 |
| 32.8' (10M) | X 530' (162M) | 62.5 | 608.44 |
| 26.24' X (8M) | X 530' (162M) | 50 | 486.75 |
| 20' (6.2M) | X 530' (162M) | 38.7 | 371.00 |

4/21/2015

1

Smart Net Prices & Dimensions continued

| 330 FEET – 101 METERS | | WEIGHT IN LBS | PRICE IN USD |
|-----------------------|---------------|---------------|--------------|
| 50' (15.24M) | X 330' (101M) | 60.4 | 577.50 |
| 40' (12.2M) | X 330' (101M) | 48.4 | 462.00 |
| 32.8' (10M) | X 330' (101M) | 39.6 | 378.84 |
| 26.24' X (8M) | X 330' (101M) | 31.7 | 303.07 |
| 20' (6.2M) | X 330' (101M) | 24.5 | 231.00 |
| 12' (3.65M) | X 330' (101M) | 15.9 | 138.60 |

| | | |
|------------|----|--------|
| 50' X 50' | 9 | 100.00 |
| 50' X 100' | 18 | 200.00 |

4/21/2015

6

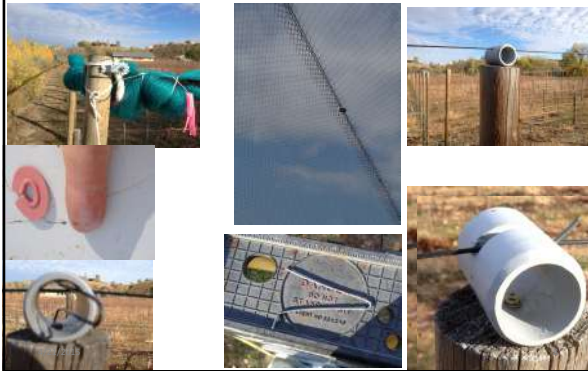
Layout Example

—Vineyard 250 feet long x 175 feet wide. (1 acre)
 Requires ½ roll of 26.4' x 530 (\$ 152)
 Requires 1 ½ rolls of 50 x530 (\$1500)
 Side curtains: 2.6 rolls 12x330 (\$ 360)
 Posts: 22 rows x 6= 132 posts (\$1000)
 5500 feet Duraline (\$ 200)
 Misc: pvc pipe, clips, wire, bolts (\$ 200)
 TOTAL PER ACRE (estimated) \$3412
(Plus shipping & Import Duty) \$3700 total
Single row netting: ~\$1000

4/21/2015

7

Overhead Netting Ingredients



Middle (floating) Wires



Middle wires are threaded through horizontally drilled holes.
 —Note pipe chamfering.

4/21/2015

9

Net Edge Wire rests

- Wire needs to be used every row at the tops of the posts. We use electrical PVC with a groove cut into the tops for the wire, and a hole drilled, to screw to the post beneath.



Fastening the Edge Wires

The wire is held in place with a metal clip made with high-tension steel wire.



C-Clips

C-Clips are used to join wire together where sections meet.



Netting Joint

Side Curtain
joined to Top
netting with
C-Clips every
3-6 feet.



4/21/2015

13

Posts



10 foot tall net
posts are bolted to
trellis posts.

4/21/2015

14

Anchoring Corner Posts

As you can
see, I'll need
to wait until
we stretch
the netting
to anchor
this corner
post.



4/21/2015

15

Post Season Tie-back



Side-Curtains gathered, overhead nets tied back for off-season.

4/21/2015

16

Netting Repair

Make sure you get a netting repair kit if you use overhead netting.

- Spool of poly light cord.
- Shuttle



4/21/2015

17

Netting Considerations

- Netting threaded on edge wires, floats on intermediate wires.
- We used Duraline 12 ½ guage plastic wire for overhead. Can tie by hand. It's plastic wire.
- Rabbits will chew through the netting. Shoot them before you put up the side curtains! Eat them if it's a cool month!
- Put up nets as soon as you see color on your fruit or you will get birds salivating from free taste samples. Not a good idea!

4/21/2015

18

OTHER APPLICATIONS



Nets can be simply draped over existing posts and wires, hung over all 4 sides.

4/21/2015

19

Labor for 44 rows x 250 ft (2 acres)

- **Year 1 SETUP:** Several days to mate tall poles to existing trellis, perhaps set a few more poles, and guy corner posts. Netting needs to be measured, cut to fit, etc.
- **POST-SETUP labor:**
- 2-3 days to slide nets from one end to other, tie down, c-clip together.
- 15-30 minutes for “bird scare” party followed by wine!
- 2-3 days to remove c-clips and tie netting for winter.

4/21/2015

20

Pros and Cons

-More expensive: ~3 times more.

-Heavy Snow will bring it down.

—Beautiful to work under. No tendrils/canes growing through, no need to move nets to get samples, no moving nets to harvest, no moving nets to prune/hedge, etc.

—Absolutely no crop loss. Compare: 22 rows x 250 feet= approx 700 vines x 10 lb/vine average=7000 lbs of grapes.

10% loss= 700 lbs/14 lbs= 50 gallons=250 bottles @\$15 each= \$3750 loss (the cost of overhead nets!)

If you are losing 10% of your crop to birds, you'd recoup the entire cost of overhead netting in one season at only a 10 lb/vine average. Substitute your figures, see what you get!!

4/21/2015

21

Final Word

- Remove and tie back as soon as you harvest, or at least before heavy wet snow, or the snow will take it down for you. And some of the posts. Expensive mistake!
- Posts are best about every 50 feet, every row.
- Fruit loss to birds estimated at 5-25% with over row netting. We lost 50%!!
- (Robins land on over the row nets, bounce, eat!)
- Fruit loss with overhead netting near zero.
- A few birds may need to beremoved.

4/21/2015

22
