NRCS Natural Resources Conservation Service

Access Control

Bird Exclusion Netting

NH Conservation Practice Job Sheet NH-472

Purpose

The purpose of the netting is to exclude destructive bird pests from highbush blueberry, raspberry and grapevine plantings. The netting is used as an alternative to spray-on taste repellants or other chemical deterrents.

Bird exclusion netting is part of an IPM strategy (Prevention, Avoidance, Monitoring and Suppression or "PAMS") that is employed to prevent or mitigate pest management risks for identified natural resource concerns.

General Criteria

Lifespan: 5 years

Blueberries: A permanent, supporting structure of posts and wire is constructed to suspend the netting above the blueberry crop. Netting should cover the crops when the first blueberry fruits turn blue and taken down immediately after harvest. End and line posts shall remain in the ground for the practice lifespan.

Grapes & Raspberries: a single wire is placed at the top of the existing trellis posts to suspend the netting. Netting is applied at veraison and removed the day of harvest.

Specifications

All materials shall meet/exceed the following:

Netting: Extruded polypropylene or extruded or woven high density polyethylene. Netting shall be UV-stabilized with a mesh size ranging from 0.5 to 1.0 inches.

Wire: 12.5 gauge steel wire with Class III galvanizing or better. Black, UV-resistant polyamide monofilament wire or other black UV-resistant polywire is acceptable if recommended by the manufacturer and has a lifespan of at least 5 years. Attach wire to endposts and tension with a galvanized in-line strainer or as recommended by manufacturer.

Wood End Posts (blueberries only): Minimum diameter of 5 in. (or 4 x 6 if square), length of 10 ft, and set at least 4 ft deep. Use pressure treated or untreated red or white cedar, or black locust. Set posts at the end of each row of plants with a minimum 5° offset away from the plant row, or as recommended by manufacturer.

End Post Bracing (blueberries only): End posts must be anchored using screw or auger type anchors (6" x 36" minimum), an H-brace assembly, or a floating diagonal brace. Refer to NH-382 High Tensile Steel Smooth Wire Fence Construction Specifications for proper brace construction technique, or follow manufacturer's recommendations.

Line Posts (blueberries only): Minimum diameter of 3 inches (or 4 x 4 if square), length of 10 feet, and set a minimum of 3 feet deep. Use pressure treated or untreated red or white cedar, or black locust. Space line posts 80 feet apart from end posts and other line posts. Consider using duckbill anchors for line posts.

Risers (blueberries only): Minimum diameter of 2 inches (wood) or 1.5 inches (fiberglass or composite), length of 6 feet, and set on the ground. Space risers posts 40 feet apart to eliminate sag.

Considerations

The tops of posts and risers can be rough and potentially catch and snag the netting. A post cap of smooth material is advised.

Follow all manufacturer's safety precautions for handling and installing materials.

Netting may be applied either lengthways down the row, or perpendicular to the row.

Netting should cover the sides as well as the top of the enclosure. Sand bags can be used to hold sides in place on the ground.

Netting pieces can be "sewn" together using 12 inch long pieces of ¼" dowels that have been pencil pointed on both ends and painted to eliminated "catching" the netting.

A door assembly (covered with netting) and frame can be constructed to allow easy access to the planting for harvest.

Store netting inside if possible. If stored outside, select a dry location out of the sun, and wrap in black plastic sheeting. A rodent management plan in the area where netting is stored is advisable.

Wood Post Type:	**Wood End Posts**:	**Wood Line Posts:**
____ Black Locust ____ Red or White Cedar ____ Pressure Treated pine or other Preservative-treated wood ____ Existing Grapevine Trellis	____Diameter: min 5 inches (or 4 x 6) ____Length: min 10 feet ____Depth: min 4 feet ____Braced or anchored ____Existing Grapevine Trellis	____Diameter: min 3 inches (or 4 x 4) ____Length: min 10 feet ____Depth: min 3 feet ____Spaced max of 80 feet apart ____Existing Grapevine Trellis
Risers	**Netting**	**Smooth Wire**
____Diameter: min 2 inches (wood) ____ Diameter: min 1.5 inches (fiberglass or composite) ____Depth: ground level ____Spaced max of 40 feet apart ____Existing Grapevine Trellis	____UV-stabilized extruded polypropylene ____ UV-stabilized extruded polyethylene ____ UV-stabilized woven polyethylene ____0.50 to 1.0 inch mesh size	_____12.5 gauge steel with Class III galvanizing or better _____ Black, UV-resistant polyamide monofilament wire _____ Black, UV-resistant material recommended by manufacturer _____

CHECK OUT:

Amount Completed: _____acres. (Mark As-Built on plan map)

Remarks_____

Checked by:_____ Date:_____

References

2010. Eaton, A.T. Bird Damage Prevention for Northern New England Fruit Growers. UNH Cooperative Extension.
2009. Lord, W. UNH Cooperative Extension. Personal Communication.
2006. Hazelrigg, A. and Kingsley-Richards, S. New England Highbush Blueberry Pest Management Strategic Plan. University of Vermont. http://www.pronewengland.org/info/propubs/pmsp/blueberrypmsp2006-03-17.pdf