



TARGETED GRAZING: CONTROLLING WEEDS AND REDUCING DISEASE PRESSURE WITH SHEEP

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Go From This:



To This:



Using These:



Sheep grazing at Stillpoint Farm

Instead of these:



Or These:



Winter/Early Spring Grazing:



Spring Grazing in Early June



One Week of Grazing:



One Week of Grazing:



Spring Grazing

- Keep sheep in the hopyard until ready to string.
- Remove sheep until vines are 6 to 8 feet tall.
- Bring sheep back to graze weeds and lower leaves and emerging shoots.

Summer Grazing

- Leave sheep in the hopyard until weed control is accomplished, and in time to allow lower leaves to start to come back
- Harvest in Maryland is usually from early to late August
- Gives time for leaves to grow back for nutrient return to roots for overwintering
- Allows sufficient time for manure to incorporate into the soil

Summer Grazing Finished, Ready to Harvest!



Sheep doing their job at Sierra Nevada's new hopyard in Chico, California





Good Breeds for Grazing

- The best breeds should be good foragers.
- The breed for your area should be easily available.
- Extra benefits might include wool for hand spinners or meat from market lambs.

Some Good Breeds for Targeted Grazing in the Northeast

- **Dorper** – a hair sheep that does not need shearing.
- **Dorset** – an older English breed
- **Katahdin** – a hair sheep developed in Maine
- **Leicester Longwool** – an old English breed becoming popular with hand-spinners
- **Polypay** – developed in Idaho in the 1970's
- **Southdown** – an old English variety meat sheep
- **Texel** – bred in Holland and Scandinavia – very adaptable to many climates and conditions

Dorper Sheep



Leicester Longwool



Katahdin



Southdown



Texel





Weeds Controlled by Grazing:

Red root pigweed

Thorny pigweed

Thistles



Leafy Spurge

Many other grasses and forbs
that compete with your hops!

Your Favorite Weeds!



Bull Thistle



Red Pigweed



Spiny Pigweed



Canada Thistle




Reducing Disease Pressure with Targeted Grazing



Downy Mildew Spike in Maryland

**Reducing Disease Pressure
With Targeted Grazing**

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- Sheep love hops just like you do!
 - Graze on leaves but not bines.
 - Eat emerging shoots after stringing and training


Reduce Disease Pressure

By:

- Keeping a clean, weed-free hopyard
- Stripping the lower 3 – 4 feet of leaves from the bines
- Removing shoots after stringing and training



Sheep are only one resource:

- Sheep are only one part of the solution to integrated pest management
 - Growers may need to resort to other tools, such as fungicides, burn-off chemicals, controlled fertilization, among others.
 - Sheep can offer a strong first step in the right direction.
- 


Cautions:

- Pesticides
- Herbicides
- Fungicides
- *READ THE LABEL!*

~~Copper~~

Read the Label!

- Sheep are susceptible to copper toxicity
- No copper compounds can be used in the hopyard
- No Bordeaux mixture
- No copper sulfate



Care of Your Sheep



Fencing

- Temporary
- Permanent

Temporary Fencing



Electric Netting

Temporary Fencing




Electric Tape Fencing

Permanent Fencing



Plastic Coated High Tensile



**Cost of Fencing
is approximately
\$0.18 to \$1.25
per foot**

Source:

<http://www.sheep101.info/201/fencing.html>

Water



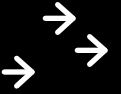
Sheep need fresh water while grazing your hopyard

Shade



Sheep need shade in the heat of the day

Shameless Self Promotion



http://www.youtube.com/watch?v=gQWiYEgt1us&feature=player_detailpage#t=128s



Resources :

- <http://www.sheep.cornell.edu/>
- <http://www.uvm.edu/extension/agriculture/?Page=sheep.html&SM=livestockmenu.html>
- <http://www.sheepandgoat.com/>
- http://www.sheepusa.org/Targeted_Grazing_Handbook
- <http://stillpointfarming.com/>