NRCS
Natural Resources Conservation Service

Vegetative Barrier
Small Scale Solutions for your Farm

Do you have a problem with soil washing from your field?

A vegetative barrier can help control washouts in your crop fields, by:

- Trapping soil
- Slowing down water
- Encouraging terraces to form

A vegetative barrier is a 3-5 foot wide strip of perennial plants placed in lines across the dominant slope of your field.

Benefits
In addition to controlling washouts, vegetative barriers:

- Take less land out of production than a traditional terrace and diversion system
- Can serve as an added source of income
- Can be planted with a hand held seeder
- Benefit wildlife such as quail by providing cover, food and shelter
- Can provide a source of forage for livestock
- Attract beneficial insects

Costs:

If you use switchgrass or Eastern gamagrass, the cost will be as little as a few cents a linear foot. Blackberries and raspberries will cost a little more but they can provide additional income once established. Vegetative barriers are less expensive to install than terraces or diversions and provide multiple benefits.

Vegetative Barrier

The plants used in a vegetative barrier must have strong, upright stems to slow down water runoff and trap soil. You will get additional benefits depending on the plants you choose.

Switchgrass and **Eastern Gamagrass** are native, perennial bunch grasses. They are very drought tolerant and thrive in a wide range of soils. Both can be grazed or cut for hay. Since they are warm season grasses, they provide a source of forage during mid to late summer when cool season grasses, such as fescue, are in a slump. Their upright, bunching growth form provides excellent cover and shelter for ground nesting birds like quail.

Planting

Switchgrass and Eastern gamagrass should be planted at the same time as corn. You will need to prepare a 3-5 foot wide firm, weed free seedbed in a line across the dominant slope of your field. A 3-foot wide barrier will work, but a 5-foot wide barrier may allow for easier equipment access. Choose the width that best fits your equipment.

Using a hand held seeder to broadcast switchgrass onto a well-prepared seed bed

Switchgrass seed is small and hard so it can be planted with a regular grass drill or broadcast with a handheld seeder.

Eastern gamagrass seed is very similar in size and shape to corn and is best planted with a corn drill. Warm season grasses are typically sold in pounds of Pure Live Seed (PLS). The table below also gives the approximate amount of bulk seed required.

Planting Recommendations for Switchgrass and Eastern Gamagrass

	Lbs per acre		Planting Method	Planting Date
	PLS	Bulk		
switchgrass	6-8	15-25	Broadcast After broadcasting, pack down the area so that about 50% of the seed is covered.	Both should be planted around the same time you would plant corn.
Eastern gamaagrasss	10-12	25	Corn Drill / no-till drill Plant at a constant depth of ¼ to ½″	

Maintenance

Switchgrass and Eastern gamagrass should not be mowed or hayed below 6 inches. Excessive mowing will decrease their stem size. This will weaken your vegetative barrier.

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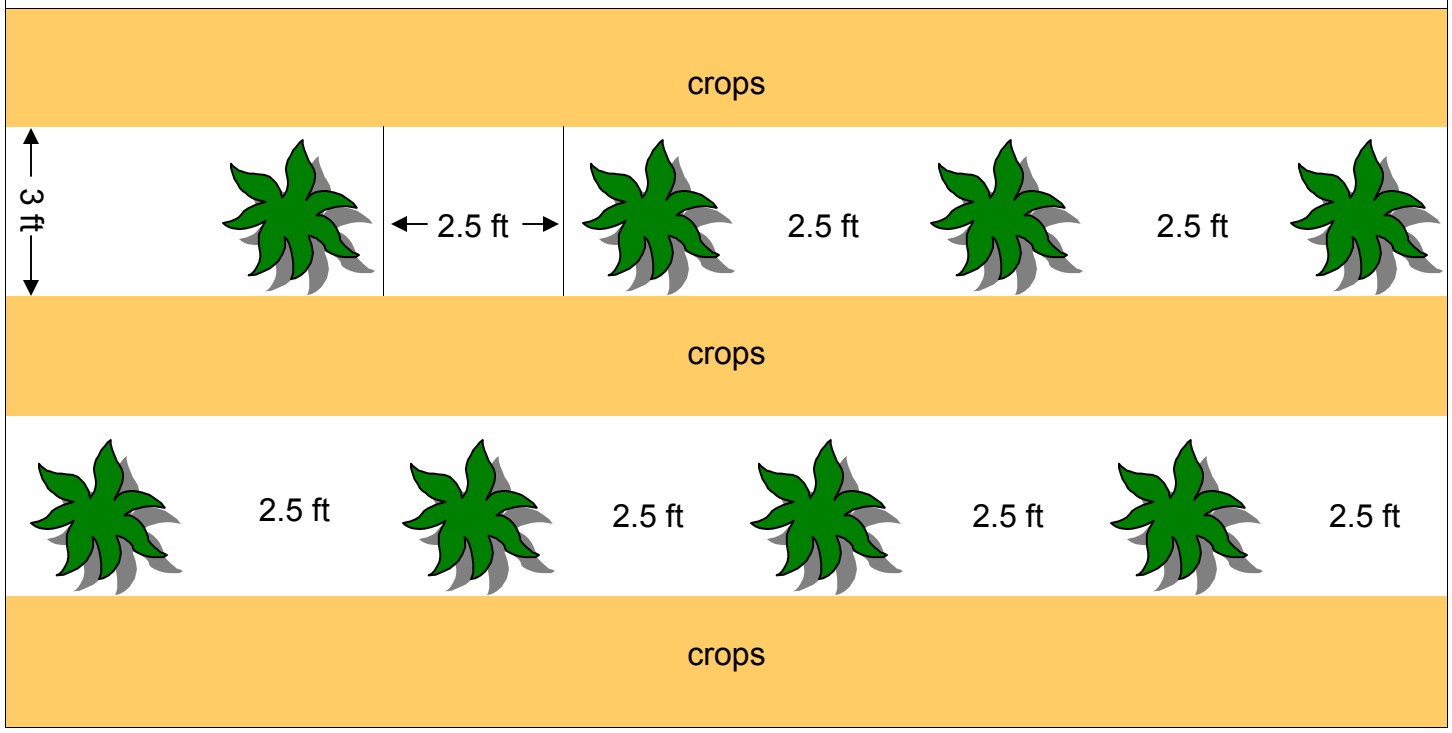
Blackberries and **Raspberries** can help attract beneficial insects and pollinators. They can also provide an additional source of income through sales as a “pick your own” operation, the local farmers market or other cooperatives.

Planting

In the south, blackberries and raspberries are best planted in the fall. In northern climates, they should be planted in the spring. You will need to plant the canes by hand in rows about 2.5 feet apart. Each row of canes will take up about a 3 foot wide space.

Planting Recommendations for Blackberries and Raspberries



Maintenance

Once established, raspberries and blackberries should be pruned annually for optimum fruit production. Tilling beside the vegetative barrier will stop unwanted shoots from spreading into your field. Be sure to keep the area free of invasive weeds and remove any tree seedlings that may sprout in between the shrubs.

Help is Available

NRCS Natural Resources Conservation Service

SMALL SCALE SOLUTIONS FOR YOUR FARM

Technical Help Is Available

Your local Natural Resources Conservation Service (NRCS) office has experienced conservationists that can assist you with laying out vegetative barriers. They can also help you develop a Conservation Plan to solve other problems you have identified on your farm.

There is no charge for our assistance. Simply call your local office at the number listed below to set up an appointment and we will come to your farm.

You may also be eligible to receive financial assistance, through a state or federal program. Your NRCS office will explain any programs that are available so you can make the best decision for your operation. All NRCS programs and services are voluntary.

Helping People Help the Land

For More Information Contact the:

Natural Resources Conservation Service

60 Quaker Lane, Suite 46
Warwick, RI 02886
(401) 828-1300
Web Address: www.ri.nrcs.usda.gov
E-mail Address: NRCSInfo@ri.usda.gov

NRCS accepts applications on a continuous basis throughout the year.

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