



# **EROSION CONTROL**

## **Cause and Effect**

Powerful rainstorms and summer monsoons can cause huge amounts of soil and nutrients to runoff slopes, washing away habitat and nutrients from plants and animals. The soil carried from slopes can accumulate in valleys after every rain, clogging drainage structures and storm drains. The more runoff and erosive force, the harder it is for plants to establish, further causing a cycle of increasing destruction. The best method of erosion control is always preventative.

### Solutions

# **Plants**

Plant foliage reduces the impact of raindrops disturbing bare soils. Root systems stabilize slopes and increase water retention, thus reducing the volume of runoff.

Plant species with a large proportion of fine roots that spread over a large area prove the best choices for slope stabilization. Groundcovers are a great option for reducing impact of raindrops.

### Geotextile

Geotextile is a large biodegradable fabric placed on slopes to prevent water from hitting bare soils and causing erosion. Often, fabrics are made of coir, jute, or burlap. Geotextiles are useful when planting on newly turned slopes as an intermittent erosion control measure while plants are establishing. Over time, the fabric will break down and leave behind a stable slope thanks to the plants.

# **Retaining Walls and Tiering**

If the slope is too unmanageable to work with plants and geotextiles alone, then a retaining wall might be a good idea. Leveling out areas or creating tiered beds reduces surface runoff by encouraging water to infiltrate into the ground. These beds can provide a space to plant a beautiful garden!

# Choice Plants for Reducing Erosion:

Echinacea -- Coneflower
Euonymus alatus — Burning Bush
Forsythia — Dwarf varieties
Hemerocallis — Daylilies
Juniperus — Creeping Junipers
Kinnikinnik
Lamium — Dead Nettle
Panicum virgatum — Switchgrass
Rhus — Sumac
Rosa — Roses
Schizachyrium scoparium — Little
Bluestem
Spring Bulbs
Symphoricarpos — Snowberry