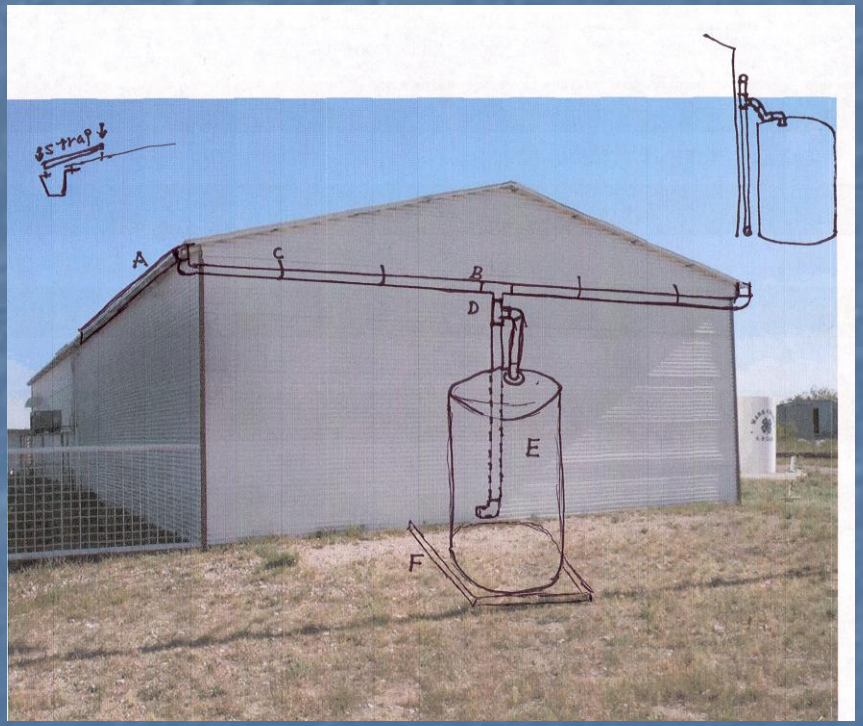
Youth Water and NR Education

- **Paint Rock Rain Collection and the Chow Ming of Concho County**

Wall Grade School

Monahans Rainwater Collection



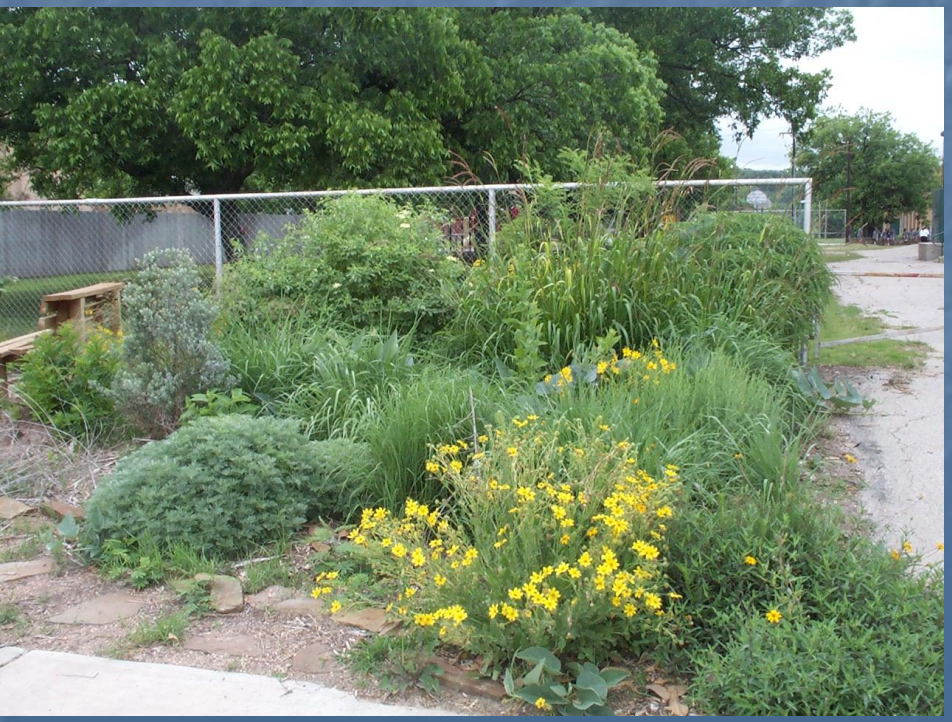
Container Gardening with 5th Grade Using Drip & Rainwater

Container Gardens

Burn at High School and 10 months later

School Burn Temperature Recording

Grass Clipping Demo.



School Landscaping

Root Growth Display and Collecting water From Air Conditioner

School Wildscape and Water 1000 g. Collection

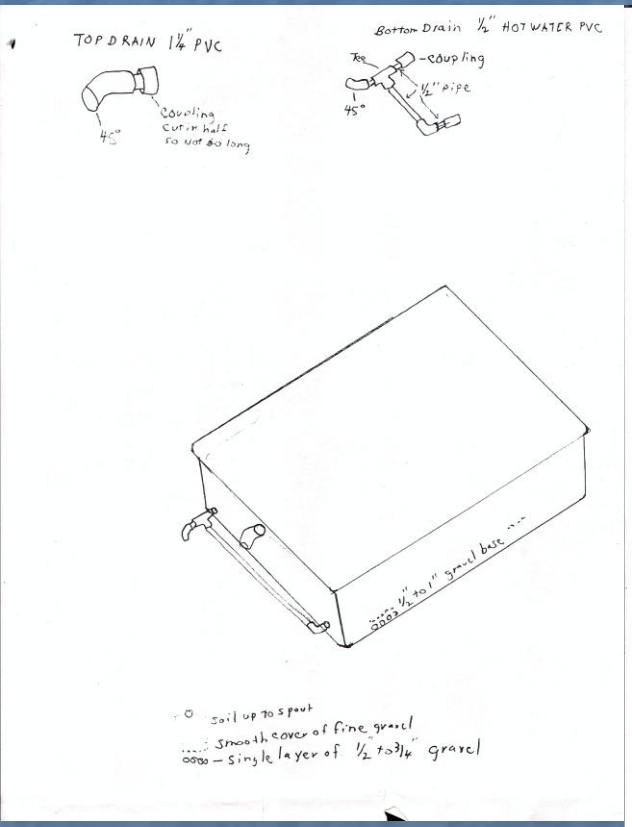
Drip Emitter on Bird Bath from Rainwater

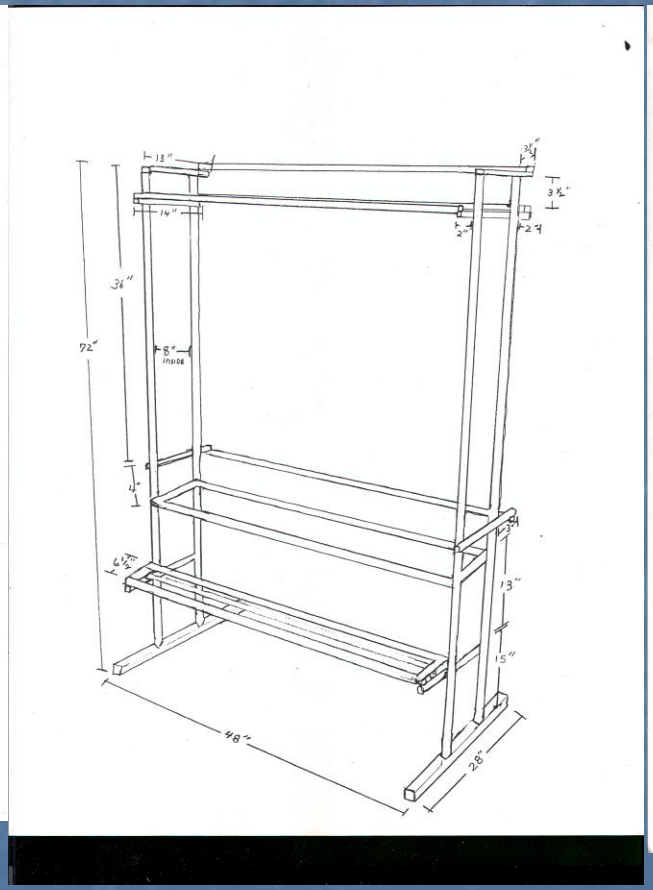
NR Education Day 4th & 5th Grade

Habitat Game

Rain Simulator

Rain Simulator Plans





RAIN SIMULATOR PLANS

The rain simulator in **Hays County** (San Marcos) Texas was built with the help of **Billy Kniffen**, County Extension Agent and **David Cox**, wildlife biologist at South West Texas State University.
The concept was taken from the NRCS rain simulators.
The idea to build a low cost, portable, adaptable tool to give visual application to good land stewardship and natural resources conservation.
The design can be changed and improved as imagination is applied and containers are made to represent local concerns and needs.

Frame: welded **square tubing**
- a. main frame - 3/4" tubing for major framing
- b. base - 1" tubing
- c. 1/2" - smaller braces and under square water catchment containers

Large **plastic containers** for top and to put plants in - 11" by 17" by 6" storage containers from Walmart
Needles in top 4 containers - 18 gauge 1" needles. Set on 2" spacings offset between rows. Total of 48 per container.
Water catching **jugs** - 5" square storage clear plastic containers from Walmart
Runoff spout - 1 1/4" PVC coupling, short pipe to connect coupling to 45 degree elbow. Hole cut so 1" section 1 1/4" fits through and PVC cement connects union snug to box.
Ground Water piping - 1/2" hot water PVC connections. (See diagram).
Planting containers:
bottom layer - ½ to 3/4" gravel - one layer thick
next layer - 1/4 to 1/2" thick layer of small gravel.
Top layer of :
- **grassland prairie** - dug up plants or transplanted native grasses in good soil with good organic matter and dead debris on top between plants.
- **overgrazed area** - soil with little to no organic matter mudded in similar to a compaction layer by cattle. Plants of low succession and no litter on top.
- **turf** - of common turf for area. May buy fresh sod being sold or cut out to fit container.
- **mulched plant** - soil with good organic matter and 2-3" of mulch.
- paved or covered area to represent **impervious layer** with possibly Kool-aid sprinkled on top to represent contamination. Used perlite with hard plastic cover sealed around with silicone.

Use **armadillo shell to represent wildlife**. They eat insects in healthy environment - overgrazed area with shell - indicates insects gone by hot bare soil temperature - so armadillo died.
Broken bottle - **what is our generation leaving behind as our legacy?** An all for now and none for later? Or will we be responsible people that improve the natural resources and pass them on to the next generation better than we found them.

Trash Can Waterer

Wildlife Water Guzzler

Ft. McKavett NR Tour

Raindrop Splash

Water Infiltration Collar

Rainfall off the Roof, From a Gutter to a Rain Barrel

Paired Watershed

Youth Observing and Pouring Water

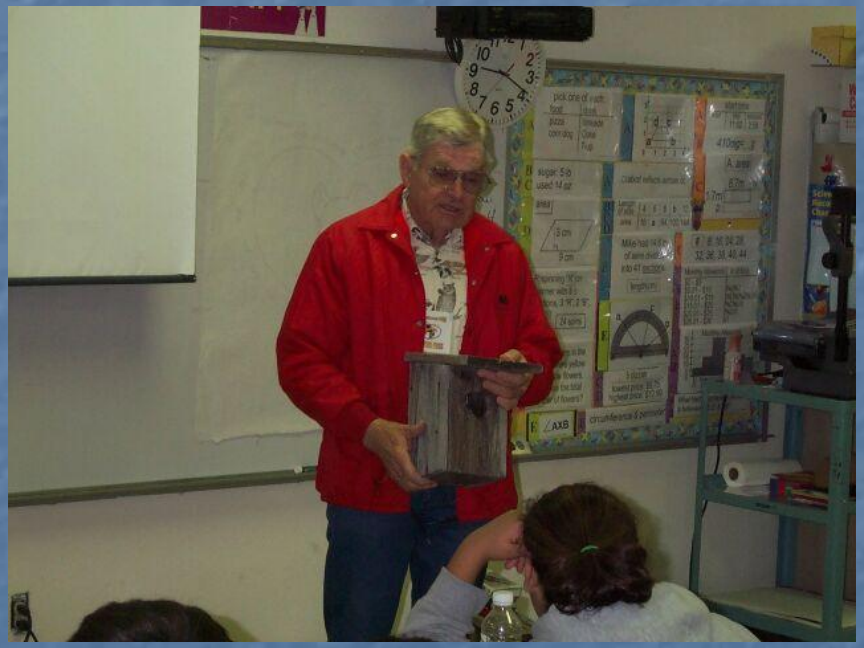
Pouring and Watching Runoff


MENARD
YELLOWJACKETS
THE SWARM
2001
100%
PURE

Rain Fun

NR Education at School

Bluebird Boxes Indian Face painting



School Landscaping and Mulching & Picking Up Trash

Outdoors Day
2003 - 2006
Menard 1st – 8th Grade

- Fishing
- Outdoor cooking
- Seining the river
- Exploring for fossils and artifacts
- Kayaking or canoeing
- Pressed flower bookmarks
- Wildlife tracks, skulls and hides
- Archery, Bike Safety

Out Doors Kids Day using Kayaks in 8x16 Pond

Ecosystem and Purple Martins

Fish Painting and Water Quality

For Information Contact:
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325-396-4787