

Tillage An Aid To Survival

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History tells us that erosion and sediment have destroyed entire civilizations. Some 7,000 years ago agriculture had its beginning in the fertile alluvial plains of Mesopotamia and the Valley of the Nile. But records also show that such cities as Babylon died and were buried by the desert sand—not because invaders sacked and razed the city, but because the irrigation canals that watered the city's "bread basket" filled with silt.

Jerash, a city of 250,000 in Biblical times, is now a village of 3,000—a once-powerful city buried to a depth of 13 feet from eroding slopes.

These actual examples demonstrate what can happen to civilizations if erosion on sloping lands is not controlled.

Can this be repeated in America, the "land of promise?"

An old time Erosion Experiment Station at Statesville measured a soil loss rate of 64 tons per acre on an 8 percent slope in fallow. At this rate, it would take only 18 years to erode away a 7-inch plow layer. Under continuous cotton, as was once the general practice, the land would lose 22 tons per acre each year. At this rate, it would take only 44 years to lose 7 inches.

Conservation tillage is defined as a form of noninversion tillage (noninversion means that you don't "turn the soil") that retains protective residue as a mulch on the ground surface. Types of conservation tillage include no-till, minimum tillage, and other types of noninversion tillage.

A 1977 North Carolina Erosion and Sediment Inventory by the Soil Conservation Service showed an average erosion rate of 7.5 tons per acre on the 6.2 million acres of cropland in North Carolina. But the rate on sloping cropland was twice this much: about 15 tons per acre a year.

This rate, if continued, would mean bad news for the productive capacity of North Carolina's farmland.

Conservation tillage is one of the most effective practices to control sheet and rill erosion and improve water filtration.

It also means money. A 1980 study of benefit/cost ratios of soil and water conservation practices for erosion and sediment control shows a net change of \$5.25 per acre for conservation tillage, assuming a 10 percent increase in yield as compared to continuous conventionally tilled soybeans.

Most research shows that yields with conservation tillage equal or exceed that by conventional tillage by 10% on well drained soils, and decreases yields by 10% on poorly drained soils.

What are the reasons for using conservation tillage?

It saves soil. Two thousand pounds of residue on the soil surface eliminates wind erosion—a problem in many North Carolina counties—and cuts water erosion in half.

Yields in dry years, like 1980, may be better because of moisture saved.

Conservation tillage saves time. Fewer trips across a field save valuable time and energy, including high-priced tractor fuel.

It improves soil structure. Less traffic means improved filtration and root development.

In 1939 W.C. Lowdermilk, a writer on lost civilizations, gave a talk on soil conservation in Jerusalem. He gave what has been called the "Eleventh Commandment"—Thou shall inherit the Holy Earth as a Faithful Steward, conserving its resources and productivity from generation to generation. Thou shall safeguard thy fields from soil erosion...

There seems to be a message for modern America here.

CHURCH BENEFIT

Young Adults of Central United Methodist Church will sponsor a country ham breakfast Sat., Nov. 22, from 6 until 11 a.m. at the church. Tickets are \$3 and the menu will feature country ham with grits, eggs and biscuits or three ham biscuits for \$3.

Try These Holiday Recipes

The calendar reminds us that the special holiday seasons are fast approaching.

For special family gatherings at any season of the year, try these recipes.

CORNISH HENS WITH RED RAISIN SAUCE

2 Cornish Hens
salt and pepper to taste
melted margarine
red raising sauce

Rub hens with salt, pepper and margarine. Place hens, breast side up, in a baking pan. Bake, uncovered, at 350 degrees about 1 hour. During the last 15 minutes, baste with the following sauce.

RED RAISIN SAUCE

1/2 c. red currant jelly

1/4 c. seedless raisins
2 tbs. melted margarine
1 tsp. lemon juice
1/8 tsp. ground allspice
Combine all ingredients in a small saucepan. Cook over medium heat, stirring occasionally, until jelly is melted and well blended.

MAGNIFIQUE BREAST OF CHICKEN

4 chicken breasts, split
salt
1/4 cup margarine
2 c. sliced mushrooms
2 cans cream of mushroom soup, undiluted
dash garlic
1/2 tsp. rosemary
1/2 c. milk

hot, cooked rice
toasted, slivered almonds
dash thyme

Salt and brown chicken in margarine. Do not flour. Set aside. Saute mushrooms in margarine. Add chicken, soups, thyme, garlic, rosemary. Pour in milk. Cover and cook in pan or casserole on low heat 45 minutes or longer, does not hurt. Serve over cooked rice. Sprinkle top with cheese and slivered almonds.

TURKEY CASSEROLE

3 c. cooked, chopped turkey or chicken
2 cans cream of chicken soup
1 c. milk
1 pkg. sage dressing mixture

1 c. turkey broth

Put turkey in bottom of baking dish. Mix soup and milk. Pour over turkey. Cover with dry dressing mixture, then pour over the dressing mixture 1 cup broth. Bake at 350 degrees for 20 minutes.

GREEN PEA CASSEROLE

1 c. chopped onion
1 c. bell pepper, chopped
1 c. chopped celery
Cook the above in 1 stick margarine until soft. Combine 1 can pimento, chopped, 2 md. cans green peas, 1 can mushroom soup and 1 can sliced water chestnuts. Add the above to onion mixture. Pour in baking dish and cover with buttered

bread crumbs. Bake in 325 degree oven for 30 minutes.

SWEET POTATO CRUNCH
Mix and pour into baking dish:
3 c. sweet potatoes, cooked, mashed

1 c. sugar
1/2 tsp. salt
1/2 stick butter or margarine
2 beaten eggs
1/2 c. milk
1 tsp. sherry, optional or tsp. lemon flavoring

1 tsp. butter flavoring
Sprinkle with 1 c. brown sugar, 1 c. nuts, chopped, 1/2 c. flour and 1/2 stick butter or margarine. Mix good and sprinkle over top. Bake at 325 degrees for 35 minutes.

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BOUNTY BIG ROLL TOWELS

You Save 10¢

79¢

PLUS 5¢ H GREEN STAMPS

28 Oz. .. No Deposit

COKE

59¢

BETTY CROCKER 19 oz. Box

CAKE MIXES

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JFG... 32 oz.

MAYONNAISE

89¢

HOLIDAY DAIRY

BREAKSTONE 8oz.

FRESH DIPS 99¢

BREAKSTONE... 16 oz.

SOUR CREAM 85¢

KRAFT... 8oz. BAR

CREAM CHEESE 79¢

LISTED BELOW ARE JUST A FEW EXAMPLES.. YOU REALLY SAVE

ITEM	REG. PRICE	P.S. PRICE
WHITE HOUSE... 16oz.	43¢	31¢
APPLE JUICE HUNTS... 15 oz.	48¢	2/89¢
TOMATO SAUCE DELMONTE... 46 oz.	\$1.21	\$1.09
PINEAPPLE JUICE RED CHEER... 64oz.	\$1.49	\$1.19
APPLE JUICE PURINA... 50LB	\$2.79	\$10.29
DOG CHOW MT OLIVE... 24 oz FRESH	\$1.19	99¢
CUCUMBER CHIPS LIPTON 24 ct. FAM. PK.	\$1.69	\$1.49
TEA BAGS NESTLES... 12 ct	\$1.29	\$1.19
HOT COCOA MIX KELLOGGS... 13oz.	\$1.31	\$1.19
RICE KRISPIES QUAKER... 5LB	\$1.28	\$1.09
QUICK GRITS KRAFT... 7 1/4 oz.	2/79¢	3/49¢
MACARONI DINNERS MUELLER REG. VERMICELLI or	76¢	67¢
THIN SPAGHETTI CARNATION... 16oz	\$1.69	\$1.39
COFFEEMATE HUNTS... 32oz	99¢	89¢
KETCHUP CLOROX... 1/2 GAL	65¢	59¢
BLEACH SANKA... 8 oz.	\$4.49	\$4.39
COFFEE		

FLORIDA... STALKS..

CELERY 39¢

NO. CAR. DRY CURED

SWEET POTATOES 4 LBS. \$1.00

FRESH BUNCH... 79¢

BROCCOLI 79¢

RED EMPEROR... 69¢

GRAPES 69¢

FRESH BUNCHES

GREEN ONIONS 2/59¢

FRESH... WHITE MILK...

COCONUTS 2

WE HAVE THE BEST SELECTION OF DRIED FRUITS, NUTS, AND FRUIT CAKES... ALL YOUR HOLIDAY BAKING... HAVE A HAPPY THANKSGIVING!

HOLIDAY FIXINS

MT. OLIVE... 12 oz SWEET

SALAD CUBES 79¢

KRAFT... 7oz. JAR

MARSHMALLOW CREME 59¢

BAKERS... 12oz BAG

CHOCOLATE CHIPS 99¢

BAKERS ANGEL FLAKE

COCONUT 14oz BAG \$1.29

DOMINO... 1LB.

BOX SUGAR 79¢

REYNOLDS... 25 Ft.

HEAVY DUTY ALUMINUM FOIL 89¢

BRANDY WINE... 4oz

STEMS-PECES MUSHROOMS 2/99¢

ALL FLAVORS 3oz

JELLO GELATIN 3/1.00

LESEUR 303 TINY

SWEET PEAS 2/99¢

LIBBY'S... 16oz CAN

PUMPKIN 2/89¢

STOVE TOP 7oz

STUFFING 79¢

Laura Lynn 12 ct.

BROWN-N-SERVE ROLLS

3 for \$1.00

48oz JUG

WESSON OIL

\$4.79

OCEAN SPRAY 16oz

CRANBERRY SAUCE

2 for 99¢

FRESH..... Your CHOICE

ENDIVE ESCAROLE 2/99¢

ROMAINE 2/99¢

SUNSHINE COOKIES

PEANUT BUTTER WAFERS 11oz. PK. 99¢

SUGAR WAFERS 12oz. PK. 99¢

CHIPARCOOS 12oz. PACK 99¢

Fritos... 10oz. BAG

CORN CHIPS 99¢

MOTT'S... 8oz. JUG PURE

APPLE CIDER \$1.49

CORONET... 4 ROLL PACK

BATHROOM TISSUE 99¢

FROZEN

WHOLE SUN... 12oz.

ORANGE JUICE 2/99¢

McKENZIE 8oz...

BROCCOLI STEAMS 2/89¢

BRUSSEL SPROUTS 2/89¢

MRS PAULS... 20oz.

CANDIED YAMS 89¢

TROPIC ISLE 12oz

COCONUT 89¢

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