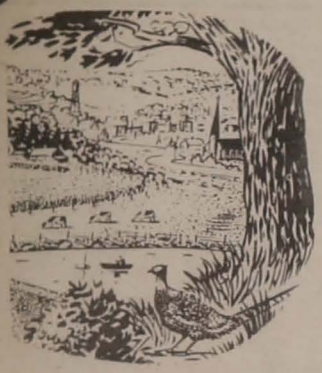

The Toledo Chronicle's

26th Annual

Soil Conservation Report

For Tama County

KEEP AMERICA BEAUTIFUL

CONSERVATION PROTECTS AND PROVIDES

1985 District Activities

Reorganization of officers: Dan Bruene, chairman; Franklin Bro, vice chairman; Audrey Wheeler, secretary-treasurer, Ferd Kvidera and Harry Scurr appointed assistant commissioner.

Commissioners attended the Annual Short Course at ISU.

The Annual Awards Banquet was held in Tama.

Commissioners agreed to enter the Essay contest.

The commissioners agreed to take a volunteer from the Correctional Services Agency.

Newsletter mailed.

The regular monthly meeting was held to include monthly review of annual work plan.

February

The Annual Contractors meeting was held in Dysart in conjunction with Benton County to help contractors stay on top of policy changes. There were 40 people in attendance.

The Annual report was published in local newspaper. The contribution letter was mailed. Federal and state dues were paid. Review of the status of the soil loss complaint. The evaluation for the state aide was reviewed. Elmer Koester's name was entered in the Goodyear Awards Contest. The regular monthly meeting was held to include monthly review of annual work plan.

March

A special meeting was held to review cost-share requests. Review of the status of the soil loss complaint. The commissioners attended the Regional meeting. Harry Scurr was nominated for the Outstanding Commissioners Award. Ten ministers attended a breakfast held in Tama for all ministers in the county (Soil Stewardship). County money approved for office equipment. A meeting was held at the Otter Creek Lake Park for distribution of IA-2000 folders. The regular monthly meeting was held to include monthly review of annual work plan.

April

Trees delivered to sixth grade students in the county in conjunction with Arbor Day. Review of the soil loss complaint status. Newsletter mailed. The regular monthly meeting was held to include monthly review of annual work plan.

May

The fifth grade Outdoor Classroom was held at Otter Creek Lake with approximately 250 students attending. Review of the soil loss complaint status. The district received correspondence informing them they had won the Good Year Award for the northern division. The regular monthly meeting was held to include monthly review of annual work plan.

June

Terri Enderes won first place in the Junior Division kof the Essay Contest and Kerri Lynne Krafka won first place in the Senior Division. Chairman Bruene attended a multi-flora rose meeting in the ASCS office. Mrs. Eleanor Holst will attend the Teachers Outlook Workshop. Iowa Conservation Awards winners were chosen: Wayne Sienknecht, new cooperator; Welby Dixon, Richard and David Cizek, landlord-tenant; Carroll Wegner, owner-operator, and Cathy Wieck as "Friend of Conservation." Welby Dixon was chosen as over all district winner. Review of the soil loss complaint. Conservation tour for summer school students studying conservation from Dysart-Geneseo School. Fifth and final year of Iowa Till contracts was completed. Erosion productivity plots staked on two farms. The regular monthly meeting was held to include monthly review of annual work plan.

July

Review of soil loss complaint. A meeting was attended concerning the Hickory Hills Recreation Area. A county committee development meeting was attended. Newsletter mailed. The regular monthly meeting was held to include monthly review of annual work plan.

August

Picnic was held with all USDA agencies. Commissioners purchased the electronic stencil cutter. State aide's evaluation reviewed. Iowa-2000 folders distributed in the Otter Creek Watershed to a few landowners. Engineering aide attended the training camp for design and layout. Regional meeting attended by commissioners. The regular monthly meeting was held to include monthly review of annual work plan.

September

Local newspaper distributes conservation issue. Soil loss complaint status update. Meeting held in the Union Grove Lake Watershed. John Kucera selected as the Izaak Walton League Windbreak winner. Multiflora Rose meeting was held. Harvested erosion productivity plots. The regular monthly meeting was held to include monthly review of annual work plan.

October

Review of soil loss complaint. The EEO and Memorandum of Understandings were reviewed. IA-200 folders were reviewed and signed by the chairman for the Otter Creek Watershed. Newsletter mailed. The regular monthly meeting was held to include monthly review of annual work plan.

November

Group terrace project begins construction in Union Grove Watershed. The regular monthly meeting was held to include monthly review of annual work plan.

December

The commissioners attended the Annual Conference held in Cedar Rapids. Meeting was held with landowners concerning the 10 year old soil loss complaint. The soil loss complaint (Salt Creek) was reviewed. Engineering aide attended the Iowa Forage and Grassland Council Meeting. Newsletter mailed. Chairman Dan Bruene and award winner Elmer Koester represented the district at the Good Year Farm, Litchfield Park, AZ.

Soil And Water-Our Lifeline

"Soil and Water - Our Lifeline" is the topic for the 1986 Essay Contest. Students in grades 6-12 have the chance to win a $50 bond at the local level and a chance to win an additional $140 if their essays win at the regional and state levels.

The contest is sponsored by the Ladies Auxiliary of the Iowa Association of Soil Conservation District Commissioner's and Grinnell Mutual Reinsurance Company. The Tama Soil Conservation District is sponsoring the contest at the local level.

Essay Contest Rules

1. This contest is open to all students who are residents of the state of Iowa.

a. Junior Division - grades 6, 7, 8; Senior Division - grades 9, 10, 11, 12.

b. Entrants must compete in the contest conducted by the soil conservation district in which they reside.

2. The essays will have a maximum of 500 words (minor conjunctions and prepositions will not be counted).

3. All manuscripts will be handwritten by the competing student.

4. The essays will be judged on originality, aptness of thought, and accuracy of information. Overall appearance and correctness of grammer and punctuation will be included in judging.

5. A title page will be provided by the soil conservation district for use by competing students. A list of reference material used for the essay must be attached to the manuscript.

6. The state winners will be asked to read their essays at the Annual Conference for Soil Conservation District Commissioners on December 1, 1986, in Des Moines.

7. Completed essays need to be turned into the Tama Soil Conservation District office by May 30, 1986.

Contest Awards

Prizes for Local Winners:

Senior Division - $50 bond, First Place; Certificate, Second Place.

Junior Division - $50 bond, First Place; Certificate, Second Place.

Prizes for Regional Winners:

Senior Division - $40, First Place; $30, Second Place.

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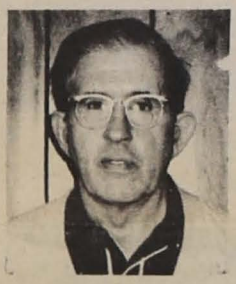
Pick Of The Crop—Award-winning conservationists Elmer Koester and Daniel Bruene Gladbrook, harvest oranges during a recent visit to the Wigwam resort and Goodyear Farm Litchfield Park, Ariz. They were among the representatives of the nation's top conservation districts who participated in the 28th annual Goodyear Conservation Awards Program.

Commissioner's Comments

Dan Bruene
Chairman,
District Commissioners

From what we know today, it looks like the farm program will provide farmers with a good way to reduce soil losses on their farms. By taking the setaside acres that are required and putting them in the most critical areas, one could reduce his soil losses and remove the least profitable land from production. In trying to make the best of bad times, removal of the least profitable areas will give you two benefits: less soil loss and more efficient use of your agricultural inputs.



Russell Lyon
Commissioner

The current economic squeeze dictates that farmers cut costs wherever and whenever possible in an attempt to make a profit on a crop. While this is a worthy goal let us not forget conservation of the soil in the process. Several practices can be used with little or no cost. Conservation tillage, contours, strip cropping and seeding to grasses prevent serious erosion and in many cases reduce erosion below the acceptable five ton per acre per year.

Stop in the SCS office and discuss your situation with the friendly folks working there. Remember conservation doesn't cost, it pays.

Richard Havran
Commissioner

Hello again!

It is that time of the year to write a few lines about soil conservation. It seems as if during the past year nothing has changed. The same problems persist. Everything is bad, and it's going to get worse, is the attitude that abounds in the countryside. You can only kill something once and then it is dead, so lets start thinking good, positive thoughts, that this is going to be the best year ever! With that kind of approach we can make a greater effort to improve our goals toward soil and water conservation.

The farmers in Tama County have done a great job in 1985. Remember, every year is like the start of a brand new race - fresh and clean. Let's all do what we can for soil conservation.

Planting one small tree or doing a large practice like terracing is a start that is positive and says you are looking ahead toward a brighter tomorrow.

That positive attitude will take charge and make you a better person along with improving your farm as a side benefit.

Good Luck! Set your goals high.

Pat Kadramas
Commissioner

"Pretty as a picture", shades of green", symetrically lines of design", and "good high-and-low depth or texture" are all phases that you'd expect a woman to say about art, clothes or decorating a house.

As the only woman conservation commissioner in Tama County, I'm going to use these phrases to describe contoured fields with strip-cropping. Next time you drive around fields planted like this, take a good look and see scenery "pretty as a picture" as the corn strips meander around the hillsides on the contour. Note the "good high-and-low depth or texture" as you see the higher-growing corn interspaced with strips of lower-growing soybeans, oats and hay. Note how the strips of lower-growing strips seem to flow with nature or have good "symetrically lines of design." These crops planted with the character of the land, protect its priceless soil from wind and sheeting rains.

When you are noting the shades of green, compare contoured land with land planted up and down the hillsides. On those planted up and down the hill, you'll notice a more abrupt change from green to yellow as you come upon light or dry ground. That's because the contoured land is holding the moisture longer instead of letting it shoot straight down to the bottom of the hill, letting more plants use it.

Most people dress or furnish their homes to reflect their character. We all need

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SOIL CONSERVATION DISTRICT ACCOMPLISHMENTS

Fiscal Year 1985

District Cooperators	7 No.	869 Ac.
Sediment and Water Control Basins	38 No.	-
Terraces		102,110 Ft.
Grassed Waterways		63 Ac.
Contour Farming		2,086 Ac.
Farmstead & Feedlot Windbreaks		10 Ac.
Conservation Tillage		1,264 Ac.
Grade Stabilization Structures	5 No.	
Soil Survey		94,000 Ac.
Plans and Alternatives		3,214 Ac.

BUDGETS

July 1, 1984 - June 30, 1985

1M

Commissioners Mileage, Meals, Hotel	$1,744.25
Office Supplies & Expenses	$ 928.69
Printing	$ 140.35

2M

Clerk and Engineering Aide Salary	$ 28,880.00

3M

84-85 Allocation	$86,215.00
52 Agreements Approved	
39 Agreements Completed	

Commissioner's Comments

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to farm our land to reflect its nature or character.

Franklin Bro
Commissioner

We should all realize by now that we can't keep on farming fence to fence, continuous crops with any regard to conservation. Our whole existence for years to come depends upon keeping the soil where it is and not having it wash or blow away.

There are so many things we can do that really doesn't cost much, and will actually save you money over the long pull such as - conservation tillage, contouring, strip-cropping and crop rotation. I want to elaborate mostly on crop rotation in this article. A five year rotation of three years of corn, one year small grain and one year of meadow can actually cut soil losses in half compared to continuous cropping of corn and even more than that compared to a corn-bean rotation. Small grain can net more money than beans, and a good legume seeded can put as much as 100 pounds Nitrogen in the soil.

Let's all try to practice these conservation practices, so that we can keep on farming, and turn our land over to the next generation in better condition than it is now.

Ferd Kvidera
Assistant Commissioner

"We should all be concerned about the future, because we will have to spend the rest of our lives there." If C.F. Kettering had been thinking about soil conservation when he uttered these lines, he might have added, "and children, grandchildren, and all generations will spend their lives there also."

Just as we can enjoy the comfort of an evergreen windbreak, or the shade of a mighty oak because someone in a previous generation was conservation-minded enough to plant trees, so we should also "plant the seeds" of good soil and water conservation for not only the comfort, but the very livelihood of future generations.

Prairie Restoration And Management

By Steve Lekwa

The last few years have seen a dramatic increase in interest in all things connected to Iowa's prairie heritage. One area of interest that has really grown in the reconstruction of prairie on lands where prairie may not have existed for decades. This is being done for wildlife habitat, scientific, and aesthetic reasons.

Techniques for successful prairie reconstructions are still being researched, but the following advice is pretty much "state of the art" as far as Iowa experience is concerned.

Seed Acquisition

One of the first items you'll need to think about is a seed source. For smaller plots, you may be able to harvest enough grass and flower seed by hand from local prairie remnants or even road ditches. Be sure to ask owners first!

You'll need to dry the seed thoroughly before storing it for the winter.

Special stratification (cold storage) treatments may improve germination of some species. Information on how to stratify seed is contained in publications such as the "prairie Propagation Handbook," Boerner Botanical Gardens, Whitnall Park, Milwaukee County Park System. It is also available from the Missouri Prairie Foundation, P.O. Box 200, Columbia, Missouri 65201. Minimum stratification would be holding the seed over winter at no higher than 34°F. Try to keep it cool until seeding.

An alternative to hand collection and home processing is ordering seed from some of the special prairie seed dealers. This may be especially necessary for larger plantings of several acres. Plan to order seed of the genetic variety best suited to your climate and site conditions. Also remember that many of the prairie seeds are very bulky and contain large amounts of chaffy material. You will buy the seed in terms of pounds of pure live seed (PLS). Expect to pay around $100 per acre for a good grass-forb seed mixture. The dealer can generally help you select the right varieties..

Site Preparation and Seeding

Seedbed preparation is very important. Small plots can be rototilled and kept weed free for a season prior to planting. Larger plots may need to be fall plowed and disked several times prior to planting. Your site may need to be rolled to assure that the ultimate seedbed is weed free and firm. Prairie species do not like fluffy soil! Fertilizer is generally not needed, but some sites benefit from adding up to 60 pounds of phosphorus and 40 pounds of potassium per acre. Avoid adding nitrogen since it encourages weeds more than prairie. Add lime if testing indicates it is needed.

No-till chemical seedbed preparation is possible now as well. You may need to burn the site off in early spring if the old growth is especially tall or dense. Roundup herbicide is then applied at recommended rates to the new green growth when it is six to eight inches high. The seeds are then sown directly into the standing dead stubble. (Give the spray at least a few days to work before seeding.) The stubble can be mowed right after seeding and will serve as a light mulch.

The smaller plots can be effectively hand seeded, raked in, and rolled, but the larger ones benefit from the use of a native grass drill such as the Traux. At least 25 of these units are in use around Iowa now.

Hand seeding rates may need to be slightly heavier, but in any case you should be striving to obtain around 40

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Fury On The Prairie

By Dean M. Roosa

The fury of prairie fires was known to the earliest prairie inhabitants, the pioneers, and to every prairie animal. One of the most common remarks in pioneer journals related to the prairie fire -- the fear engendered, the danger of carelessness, the methods of surviving and the renewal afterward. Native Americans intentionally started them to provide lush growth early to attract game. Fires swept across the interior of North America, across Iowa, frequently. Only the leeward side of lakes and streams escaped. In portions of Iowa, especially where wetlands prevented regular occurrence of prairie fires, burr oaks were able to withstand the fires. This left a community of scattered oaks with native grasses beneath -- this community is called a savanna and is still visible across the state, but the native grasses have been replaced by bluegrass.

The prairie fire was instrumental in keeping the prairies treeless, particularly in recent times. Now that prairie fires are longer a natural force, prairie managers must use controlled fires each spring in an attempt to duplicate the native conditions. Fires are used to prevent woody species from invading prairies, to induce flowering of certain species, and to recycle nutrients faster. Dogwoods and sumac are major invaders in the Loess Hills of western Iowa; quaking aspen and Siberian elm are rapid invaders in northeastern Iowa; junipers (red cedar) are becoming a nuisance in many parts of the state.

Each spring management biologists burn a portion of most state-owned prairies. Usually no more than one-fourth of a prairie is burned at one time to assure small mammals, birds, and insects will not be eliminated. Burning is ordinarily done in late March and April, before the first prairie birds nest.

Conditions must be just right, with a light breeze and the prairie dry enough to support a fire. Many April mornings in Iowa are windy, causing a postponement. If an unusually wet spring occurs, few or no prairies get burned.

Participating in a prairie burn can be exciting. It can permit one to relive the fear and awe felt by the pioneers. It can also be dangerous, should the wind suddenly change. If this happens, there is a frantic effort to contain the fire lest it engulf the entire prairie and escape to nearby fields. Occasionally twisters or "whirlwinds" develop, creating the "roar of the prairie fire" so commonly mentioned in prairie lore.

The prairies and their resident plants and animals evolved with prairie fires. Plants have a sizeable portion of their biomass below ground and begin rapid growth after a fire and some require a fire to bloom and set seed. So, as drastic as prairie fires seem, they are an essential management tool. When you see a controlled prairie fire, reflect on the history and biology wrapped up in the flames as they leap skyward.

Soil Survey-Tama County

The soil survey in Tama County has completed its second year. The soil surveyors are temporarily in surveyors are temporarily part of the Soil Conservation District office in Toledo. They began the survey in Lincoln and Grant Townships, and have progressed to the southern townships of Highland and Columbia. This spring they will continue to map in Columbia and Highland Townships. They have mapped approximately 204,000 acres. There is a total of 460,000 acres in Tama County. It will be about three to three and one-half more years before the county will be completed.

The present survey is an updating of the older survey done in 1935. The reason for the remapping is the knowledge of soils have increased. The intensive mapping will provide better information and a more accurate soil survey.

The older survey had 20 soil types and 50 erosion and slope phases. The soil surveyors have presently indentified 51 soil types and are presently mapping 157 erosion and slope phases. Most people ask, "has the soil changed that much in 50 years." The answer is no, the soil hasn't changed. But as stated earlier, our knowledge about soil has changed. Some of the changes are that in 1935 Carrrington soils were mapped over a large part of the county. Carrington is no longer mapped, but four other types in its place are mapped. They are Dinsdale, Liscomb, Shelby, and Adair. Carrington was mapped as a brown colored, loam textured soil developed from glacial material. Dinsdale has a 20 to 40 inch covering of silty textured loess over the glacial material. Liscomb and Shelby are very similar in color and material to Carrington. The main difference is Liscomb is a loam texture, and Shelby is clay loam textured. Shelby has about 10 percent more clay. Adair is a red clayey soil in the upper 10 to 24 inches, and is similar in texture and color to Shelby in the lower part.

Another difference in the present survey from the older survey is the Tama, Downs, and Fayette sequence of soils. The soil surveyors are mapping a larger percent of Fayette and Downs soils than were mapped on the 1935 soil survey. The sequence is based on the soils native vegetation. Tama soils developed under tall-prairie grasses, Downs developed under a mixture of prairie grasses and trees, and Fayette soils developed under a fully forested vegetation. One of the major differences of the those soils is the topsoil. Tama has a black thick topsoil. Downs has a thinner not quite as black topsoil, and Fayette has a dark gray colored topsoil. Another important difference of the three soils is the availability of phosphorous in the subsoil for plant growth. Where Fayette has the more developed subsoil with a higher amount of phosphate and Tama has the least.

Knowing the difference between Tama, Downs, and Fayette soils when having soil testing done is of major importance. If soil tests are made for phosphate on these soils, and the test is found to be low, recommendations for phosphate application to Fayette would be lower than those recommendations for Tama. This is because of the inherited characteristics of the soil. The forested Fayette soil is more developed and has a higher acidity than the Tama prairie soil. The higher acidity promotes a faster breakdown of minerals in the soil. This in turn makes a higher concentration of minerals available for crop production. Phosphate being one of the more important, would then be more readily available for plant use in the Fayette soil, whereas the Tama soil would need to have phosphate added from an outside source.

Fayette and Downs were mostly mapped along the Iowa River and along Wolfe Creek on the 1935 survey. The soil surveyors are now finding Fayette and Downs to be present along the major tributaries of the Iowa River, and a larger area along the north side of the Wolfe Creek.

Still Probing! SCS Soil Scientists continue probing the soils of Tama County to continue work on the Soil Survey for Tama County. To date, the West 14 sections, North of Highway 229, have been completed. This spring the "Dirt Boys" will continue mapping the western portions of the county, working their way towards the Iowa River Valley. Pictured (left to right): Al Younk, Robin Wisner, party leader, and Gary Hillmer with mapping companion, Dillon, the dog.

Erosion vs Yields

What happens to yields when topsoil washes out of the field? For years we've heard that yields are reduced, somewhat. We've heard that yield losses from erosion were compensated for by planting improved hybrids and increasing fertilizer amounts. We just didn't **know** exactly how much yield reduction resulted from erosion.

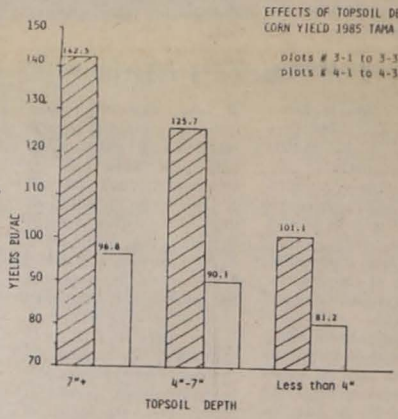
In 1983 the Soil Conservation Service and Iowa State University undertook a study, to determine the effect of erosion on corn yields. The test plots are scattered around Iowa in 41 counties with five-seven plots per county. All plots are plots per county. All plots were identified after corn emergence in individual farmer's fields. These are not mini research farm plots.

With three years of data collected to date, a trend is becoming established. As the depth of topsoil decreases so do yields - about five to 10 bushels per acre for each shift in erosion phase. In otherwords as a gently sloping soil erodes from slightly eroded to moderately eroded, yields drop by five to 10 bushels/acre. The same holds true as soils erode from moderately eroded to severely eroded. This yield loss occurs every year and will be even greater in times of moisture stress.

This year in Tama County (see bar graph) we observed a 41 bushel yield difference in one field between the slightly eroded soil and the severely eroded soil. All inputs and costs were the same for all plots in that field, yet - **The severely eroded plot returned $102.50 less per acre!** (Assuming $2.50 corn)

We realize that these figures are for one year only. If rainfall patterns were more favorable we would expect yield differences to be more in line with the state averages. The statewide study will continue for several years.

Complete productivity plot data is available at the Soil Conservation Service office.



NOTE: Plots # 3-1 to 3-3 were corn on corn on Tama soils located in the same field within 300' of each other.
Plots #4-1 to 4-3 were corn on sod on Liscomb soils located in the same field within 150' of each other.

SOIL

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Junior Division - $40, First Place; $30, Second Place.

Prizes for State Winners:

Senior Division - $100, First Place; $75, Second Place.

Junior Division - $100, First Place; $75, Second Place.

PRAIRIE

Continued From Page 19

to 60 seeds per square-foot density.

Prime seeding time is from mid-May to mid-June, but seedings can be successful as late as mid-July especially on small sites that can be hand watered.

You'll doubtlessly see weeds popping up before you see your new prairie seedlings. Prairie seeds are notoriously slow to germinate and even slower to grow. The little seedlings will need lots of sun when they germinate so it is important to either remove the weeds by hand or at least keep your plot mowed to about six inches. Virtually all prairie plants are perennials and spend their first season growing root systems rather than leaves. A mature prairie has more living material below ground than above.

The primary competitors against prairie seedlings are cool-season grasses and annual weeds. Many of them start growing sooner in the spring and grow faster before the warm-season prairie natives start their growth. You may want to mow once or twice in May or early June of the second year, but then it is hands off unless there are particularly bad weed problems to deal with. Your new prairie should start to show some strength by the fall of the second year. Do not be surprised, however, if it takes as many as four to six years for some of the flowering plants to bloom.

Any discussion of prairie management would be incomplete without mentioning fire. It is the primary management tool used to maintain a prairie. Mowing and removal of the cuttlings is a substitute in areas where burning is not possible.

Burn management (or mowing) usually takes place in spring or fall when there is enough dry fuel to support the fire, and when most prairie plants are dormant. It can be beneficial anytime after the first year and should be considered at least every four years. The fire releases nutrients back to the soil, allows quicker warming of the soil in spring, and retards woody growth that might otherwise shade out a prairie.

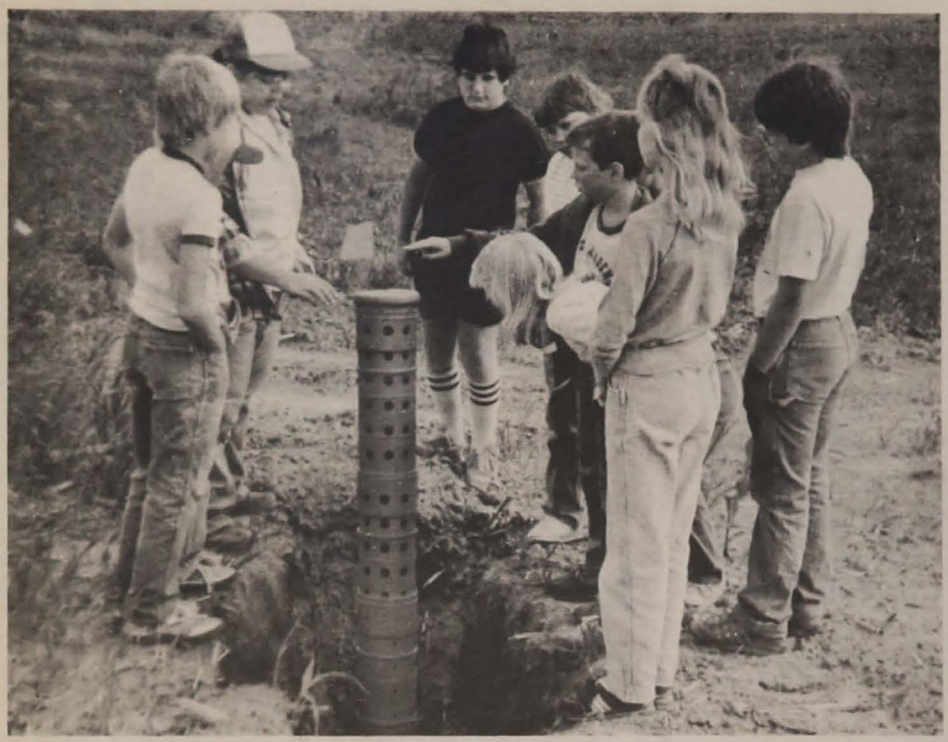
Burning can safely be conducted as long as you have a source of water (garden hose, backpack sprayer, etc.) and not too much wind on smaller plots. Larger plots require some special techniques, but are also manageable when properly equipped. Mowed fire-check strips, rakes, fire swatters, and sprayers are almost a must. Your local conservation authorities can advise you of special techniques and precautions.

This discussion on prairie establishment is admittedly simplified. It does cover the main points, however. Much more information is available from literature and nearby local authorities such as county conservation boards, SCS personnel, and Conservation Commission biologists.

Begin planning early, at least the fall before planting. Be patient, prairies take time. Add all the forb seed you can afford to buy or collect. Remember that prairies are North America's most diverse plant communities. Learn all you can before you start. A word of warning is in order, however; prairie study can be habit forming. Once hooked, you will become one of a growing number of prairie freaks all over the midwest.

Pictured from left are Craig Stange, district conservationist; Audrey Wheeler, state clerk; Daun Rudis, soil conservationist; Mel Henningson, state technician, and Ray Drewelow, soil conservation technician, all staff members of the SCS office.

The ASCS staff includes, from left, Rodney Johannsen, county executive director; Barb Hempy, ACP; Joyce Bolen, price support assistant; Nancy Smith, temp. office; Sharon Bruene, temp. office, and Diane Pokorny, feed grain compliance.



Students attending a summer school session on conservation at Dysart-Geneseo School went on a conservation tour in June. Here, they ask questions and listen as Daun Rudis, Soil Conservationist, explains what a tile intake is and how it will function after the terrace is built.

Student Conservation Tour

On Wednesday, June 19, 1985 a group of fifth and sixth grade students, participating in a summer school session devoted to conservation at Dysart/Geneseo school, went on a tour with Daun Rudis, Soil Conservationist - Soil Conservation Service.

At the first tour stop, the children were introduced to conservation practices; what they are and how they work. The practices included grassed waterways, contours, terraces and grassed headlands.

The second stop was on a farm that had a working conservation cropping system. The system included such practices as contour stripcropping, grassed waterways, and residue management through the use of minimum tillage and no-till. At this site the students participated in locating the farm unit on different types of maps. First they used a map of the county to locate the general area of the farm, then they found the unit in the plat book. From here they progressed to finding the farm on an aerial photo, soils map, and topographic map. The contours that appeared on the topographic map were discussed in some detail as to how they related to the actual lay of the land. With the map reading complete, soil loss calculations and alternative conservation practices to reduce soil losses were discussed. Rudis demonstrated to the students how soil losses are calculated by using the Hewlett Packard Programable Calculator. She went on to explain, how these calculations are incorporated into a farm conservation plan and used by farmers to determine what types of conservation practices could be used to reduce the soil loss.

The last tour stop was at an actual terrace construction site where terraces were being built. The students saw how the topsoil was stripped before the terraces are built and saw the bulldozers packing in the major fill for the terrace.

The dumpy level and philadelphia rod were set up so that students could see how terraces are surveyed before and after construction.

Some of the other equipment the students were able to view and try their hand at were a clinometer and hand level.

The time spent on the tour went fast with very inquisitive students learning about conservation and how it's applied to the land.

Conservation Reserve May Help Wildlife Population

One of the most important and far-reaching programs in the last 20 years is looming on the horizon, and our local wildlife populations could be one of the principal beneficiaries. The 1985 Farm Bill, recently passed by Congress, was structured to provide long-term soil, water and wildlife conservation benefits in addition to the traditional commodity control features. Final decisions on how the act will be administered were not available at this writing, but the bill does appear to provide substantial wildlife benefits.

Bob Kurtt, Tama County Wildlife Biologist

The biggest impact will be realized from the Conservation Reserve Program, which will retire erodible lands that have been cropped two of the last five years. Contracts will last 10 years and will require the establishment of permanent vegetation on these acres on a 50% cost-share basis. If permanent seedings of native grasses, grass-legume mixtures or woody plants are established, and mowing and grazing are prohibited until after critical nesting seasons, the wildlife benefits will be substantial.

Most people remember the Soil Bank days of the 1960's, with its long-term benefits for soil, water and wildlife. Pheasant numbers were at their peak in those days, primarily due to long-term seedings on vast acreages here in the farm belt. Many things have changed since then, with sloughs being tiled out, woody fencerows bulldozed, and old farm groves destroyed, just to name a few. Some areas have so little winter cover remaining that wildlife populations may never come back to what they were in the 1960's. But the fact remains that if we want to improve local wildlife populations, we need to set land aside for longer periods than just one year. Pheasants, in particular, thrive in areas that have residual cover left over from the year before. The hen needs that old, brown dried-up grass from the year before to make her nest. Many other species of wildlife are the same way. That is the reason why long-term or multi-year set-aside programs are so beneficial to wildlife.

The new Conservation Reserve Program has tremendous potential to improve wildlife habitat and wildlife populations. Controlling soil erosion, improving water quality, and improving wildlife habitat are all benefits that can and should be a part of this program. Let's hope it is implemented properly. Our wildlife resources are important to all of us.

Bob Kurtt,
Wildlife Biologist

Iowa's Chickadee Check-off

Since the 1982 tax year, persons filing Iowa income tax foms 1040A and 1040 have had a unique opportunity. Space has been provided on these forms where persons may contribute to the Fish and Wildlife Protection Fund, or what we call the Chickadee Checkoff. All funds given to the checkoff are earmarked for nongame wildlife conservation programs, administered by the State Conservation Commission. Results for the first three years have been very encouraging. More than 100,000 tax forms have yielded more than $600,000 in contributions. Of the three dozen states with some similar form of Chickadee Checkoff, Iowa ranks very high in the rates of contributions. Before the Chickadee Checkoff, conservation efforts for nongame wildlife were funded from revenues created by hunting and fishing license sales. Most of the benefits to nongame were indirect. For example, when habitat was purchased or managed for game species, such as ducks or deer, nongame species such as herons or flying squirrels, were also benefitted. Still, nongame wildlife had no direct sponsors as the game species had in sportsmen. And, there was not an identifiable or direct nongame conservation program being carried out. Thanks to the Chickadee Checkoff, all that is changed.

Where have your checkoff dollars gone?

1. Restoration--The shy and secretive barn owl, once common in Iowa but now rare, has been the subject of an aggressive restoration campaign with Chickadee Checkoff dollars. As a result of a captive breeding program at the Commission's wildlife research station south of Boone, nearly 250 barn owls have been released into suitable habitat.

The river otter is a playful, mink-like mammal that was once abundant in Iowa. Today, they are nearly gone. In March, 1985, 16 otters were released into backwaters of Red Rock Reservoir southeast of Des Moines. In the near future, more releases involving an additional 120 otters are planned for other portions of the state.

2. Inventories--Many important inventories are now occurring to help understand the current status of nongame species, including breeding bird surveys, frog and toad surveys, winter bird feeder surveys, bald eagle inventory, midwinter raptor counts, and nest record report cards.

3. Public Education--Many special events have been conducted and are planned for the coming year, such as bald eagle days, pelican, hawk, and warbler watches. Contact the Conservation Commission for additional information on these events.

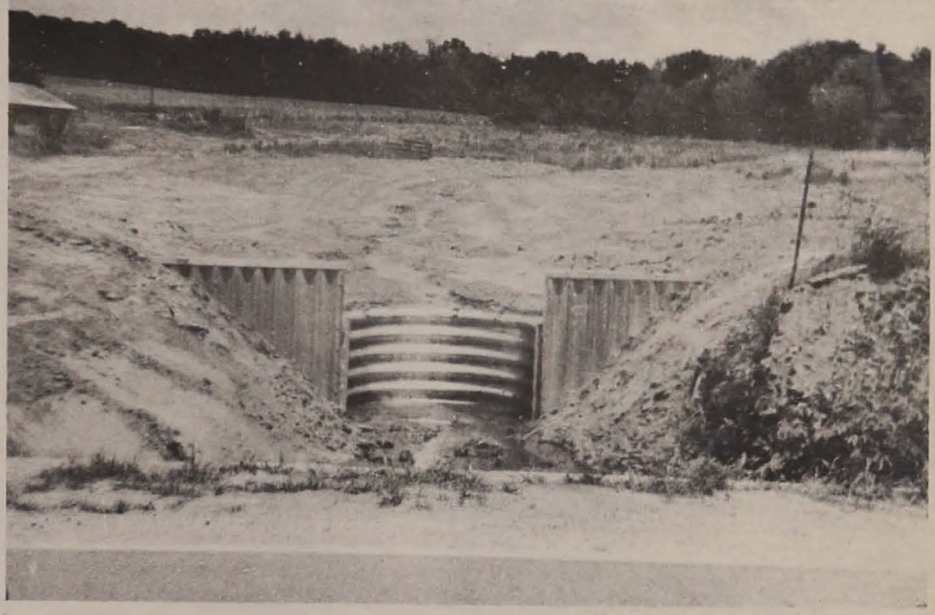
4. Urban Nongame Program--Songbird habitat packets have been developed and distributed at $10 each during the winter months, available from the state forest nursery in Ames. You must order before April.

5. Habitat Protection--Checkoff funds have also been used to protect rare animal habitats and unique habitat areas, such as a rare sand prairie in Muscatine County. Nesting structures for bluebirds, kestrels, and barn owls have been constructed and placed by biologists and volunteers throughout the state of Iowa.

6. Research--Investigations on population status and behavior will continue for threatened and endangered species throughout Iowa. Radio telemetry studies have monitored barn owl and river otter movements in areas where they have been introduced. Research has also been focused on designing backyard areas for the best possible nongame habitat.

Your Help Is Still Needed

The Conservation Commission is fully committed to developing and coordinating a nongame conservation effot a nongame conservation effort in Iowa. The program has made many significant steps forward, but for long-term successes, Iowa taxpayers must continue their generous support through the Chickadee Checkoff for many years to come. As your contributions increase, the welfare of our nongame wildlife resources becomes more assured. Everyone with an interest in nongame wildlife owes it to help themselves and those precious resources not only to help finance a nongame program through the Chickadee Checkoff, but to promote the effort so that others will also contribute.



The "book" calls a grade stabilization structure - "a structure to control the grade and head cutting in natural or artificial channels." Without causing a gully upstream or downstream.

Structures come in all types and sizes; earth fill with angled pipe, earth fill with drop pipe, concrete drop spillway, concrete toe wall, aluminum toe wall, steel toewalls. The particular type selected depends on conditions where built and the cost.

Contrary to popular belief, rolls of wire, old hog feeders, slabs of concrete, and old car bodies do not provide permanent gully control. Often times these gully plugs create more erosion than they solve. From experience we can safely say that removing junk from a gully area greatly increases grade stabilization structure cost.

These structures are especially appropriate at property lines and near road culverts where waterways drop three or more feet from the field to the bottom of a road ditch. At the present time grade stabilization structures are eligible for 50% cost sharing.

The picture shows an aluminum structure that was installed to control a four foot gully cutting back into a field. It took only two days to install and provides a permanent solution to a hard to treat gully problem.

"Man—Despite his artistic pretensions, his sophistication, and his many, many accomplishments—owes his existance to a six-inch layer of topsoil and the fact that it rains."

Anonymous

The Annual Tama County Soil Conservation awards banquet was conducted Monday evening, Jan. 27, at King Tower Cafe, Tama. Receiving awards were front row from left: Wayne Sienknecht, Gladbrook, New Cooperator; Mrs. John Kucera, Toledo, who received the Windbreak Award for her husband; Cathy Wieck, Dysart, Friend of Conservation award. In the back row, from left are: David Chizek, Toledo, Richard Chizek, Traer and Welby Dixon, Toledo, all who received the landlord-tenant award. Not pictured is Carroll Wegner, Gladbrook, owner-operator award.

Conservation Award Winners

The annual Awards banquet of the Tama County Soil Conservation District Directors was held Monday evening, Jan. 27 at the King Tower Restaurant.

Awards were presented by Tama Soil District chairman Dan Bruene in the following categories of conservation:

Wayne Sienknecht of Gladbrook was named for an award as a new cooperator, having signed up in February of 1984. However, he had been doing conservation work for a number of years before, using minimum tillage in the 1970s, planting windbreaks, contouring, and shaping waterways. In 1984, Wayne and his son, Dennis, built 5,250 feet of narrow-base terraces, and in 1985 installed an additional 2,750 feet so that the west side of their farm is protected with terraces.

In the Landlord-Tenant division, awards were given to Welby Dixon, the landowner, and to Richard and David Chizek, the tenants.

Dixon has a long record of conservation work, being an assistant soil district commissioner for four years, and then serving as a commissioner for another eight years. The Dixon farm has many conservation practices on it, including contouring, terraces, and tree plantings, with more terrace building planned for this year. The farm is operated by the Dixon's son-in-law, Richard Chizek, and grandson, David Chizek.

Carroll Wegner of Crystal Township, who was unable to be present at the awards banquet, was named in th banquet, was named in the owner-operator category. He became a cooperator with the district in 1965 and has entered into a six year, long-time agreement for installation of terraces, waterways, contouring and conservation tillage on his farm.

The Isaac Walton League Windbreak award was presented to John and Janet Kucera of Toledo. Their windbreak consists of two rows of Russian Olive, two rows of Red Cedar, and two rows of Concolor Fir. The windbreak area is kept mowed and cultivated to eliminate plant competition for the trees, and the trees have been sprayed to control red spider mites. No livestock is allowed near the windbreak trees.

The Friend of Conservation award was presented to Mrs. Paul Wieck of Dysart, a teacher in the Dysart-Geneseo school system, for taking her interest in conservation to the classroom. She has also attended summer classes and conservation workshops, to be better able to teach conservation to her students.

SCD Boosters Help Funds For Conservation

The Tama Soil Conservation District is a non-profit organization that has responsibility under state laws for carrying out a county-wide soil and water conservation program.

As such, the Tama SCD receives money from the state to aid in their programs. While this money is certainly put to good use, it isn't enough to complete all the work that commissioners of the SCD would like to do.

To help raise funds for use in promoting conservation, the commissioners once again organized in 1984 a "Booster Club" and asked people to donate money to the district. Actually the club then is a simple listing of those who have participated.

Those who are friends of conservation and have been kind enough to donate money to the district are listed below. It's with their help that the conservation movement is growing larger each year.

Those friends include:

Don Schmitz and Son, Washburn; Bob Malin, Tama; Leonard Mason, Toledo; Wilmer Meek, Tama; R.P. Young, Traer; Goos Implement, LTD, Gladbrook; R Farms Inc., Elberon; Carl Santaman, Dysart; Farmers Savings Bank, Traer; Kipp Larsen, Traer; Duane Hosek, Clutier; Paul Svoboda, Clutier; Merle McMillan, Traer; Holub Land Farm, Buckingham; Mrs. Frances Scott, Traer; Ann Sieh, Traer; Evelyn Mansfield, Belle Plaine; Joy Hayes and Ruth Starr, Marion; Ray Sears, Toledo; Lorensen & Beale, Garwin; Harold Higgins, Traer; Tama Co. Mutual Ins. Assoc., Traer; Thelma Morsing, Dubuque; William Tessau, Gladbrook; Bertha Pulkrabek, Traer; D&E Dahms, Gladbrook; Wilbur Vest, Traer; Dennis Haack, Gladbrook; Elsie Duffus, Brooklyn; Gary Heinemen, Sloan; Mrs. F.H. Moye, Reinbeck; Gethmann Construction, Inc., Gladbrook; Peterson Contractors, Inc. Reinbeck; First Community Bank & Trust, Traer; Leo Benda, Toledo; Twin Cities Insurance, Toledo; S.L. Baumeier, Gladbrook; Terry Schmitz, Gladbrook; Ed Hooper, Gladbrook; Kenneth Kenner, Chelsea; Lyman Barker & Son, Reinbeck; W.R. Farms, Garwin; Chris Harris, Tama; Wm. G. Podhajsky, Traer; Elmer Mussig, Gladbrook; Garwin Lumber Co., Inc., Garwin; Kenneth Gethmann, Gladbrook; Pritchard Bros., Buckingham; Emil Hansen, Toledo; Darrell Hunnicutt, Montour; Heckt Farms, Inc., Grundy Center; James McCutcheon, Cedar Falls; Harry Scurr, Gilman; L.A. Rasmussen, Marshalltown; Pioneer Hi-Bred International, Toledo; Richard Bruene, Gladbrook; Dorothy Sawyer, Lincoln, NE; Iowa River FS, Inc., Toledo; Mildred Dengler, Traer; Betty Benda, Tama; Eldo and Maxine Hagedorn, Garwin; A.O. and Elizabeth Chantland, Ames;

Henry Sieh Conservatorship, Melbourne; Loren Luethje, Gladbrook; Charles & Ina Wiener, Montour; Blanche Zmolek, Tama; Putnam Kellogg, Tama; R&R Farms, Gladbrook; Ken Bruene, Gladbrook; G.F.W.C. Toledo Women's Club, Toledo; Gerald & Marlene Eernisse, Toledo; Wilbert Lamprecht, Dysart; Larry and Melody Henningsen, Grundy Center; Raynard and Arlene Delfs, Toledo; Morris Bruene, Gladbrook; Smits Farm Account, Des Moines; Bohemian Mutual Ins. Assoc., Tama; Marley and Joan Bacon, Garwin; Grattan Backhoe Service, Grinnell; Clarence and Judy Sears, Gilman; John and Kathleen Sievers, Marshalltown; Floyd and Garnette Child, Traer; Ernest and Virginia Lau, Gladbrook; The Levine Co. Inc., Des Moines; Alice Hoppe, Gladbrook; Paul and Janet Koester, Gladbrook; Harold and Ferne Robertson, Reinbeck; Lauterbach Farm Partnership, Gladbrook; F.C. Earley Agency, Traer; Anna B. Paul Hiers, Front Royal, VA; Ken and Carolyn Adolphs, Traer; Harry Burd, Waterloo; Vernon and Ruth Olsen, Tama; Rupert Brubaker, Reinbeck; Mark Halverson, Toledo.

Eradication Program

Multiflora Rose is a moderate to serious problem in Tama County. It continues to spread and now poses a major threat to many of our pastures and woodland areas. In an effort to aid in the control of this pest, the Tama County Board of Supervisors proposed a method of reimbursement to help landowners on their purchase of chemicals. The Supervisors are providing up to 25% of the cost while the State of Iowa legislation, House File 2520, has provisions for up to 25% of the cost also.

Program Guidelines

1. Any owner of agricultural land in Tama County is eligible.

2. Only one payment will be made per landowner unit. A landowner unit-defined as all land owned by a family, partnership, or corporation.

3. Eligible Chemicals: A-1 brush killers that included Multiflora Rose on the label. For chemical recommendations, stop in at the Extension or SCS office.

4. Sign up for cost share may be accomplished at the SCS, ASCS, or Extension offices and must be completed on or before May 31, 1986. Participants will have until May 31, 1986 to apply chemicals and turn bills into the SCS office. Invoices must include dealers name, date, herbicide name and cost. Chemicals pruchased before June 1, 1985 are not eligible invoices.

5. Reimbursement will be based upon a pro-rated % of cost depending on interest shown and sign up. The actual payment % will not be determined until all chemical bills have been turned in May 31, 1986. Restricted use chemicals must show applicators permit number.

6. Soil District Commissioners will review all applications. All persons receiving funds will be subject to spot check to verify that the chemicals were actually applied, maximum reimbursement will be $300 per landowner unit.

If you have any questions concerning the Multiflora Rose Eradication Program, stop in or call the ASCS, SCS, or Extension Service.