

1945 ANNUAL REPORT

By DISTRICT COMMISSIONERS of the

APPANOOSE COUNTY SOIL CONSERVATION DISTRICT

It might be well to review that the Appanoose County Soil District has been organized since 11 March 1944 and has been in operation now for a period of 21 months. Seven Farm Plans were written in the County in 1944 and 29 such plans have been written in 1945. This makes a total of 36 active Farm Plans in effect on Appanoose County farms. These 36 plans represent an acreage of 7130 acres or about .022 per cent of the land area of the county. The 36 plans worked up to date are from four farmer groups which originally had 48 applicants represented.

At the close of the year there are 83 applications on hand representing an area of 17813 acres. These applications are for groups 5-6-7-8-9 as follows:

Group V

Jessie M. Adams	80
W. A. Hutchison	178
Glenn Appler	209
Harry H. McDonald	190
Hardin Guinn	140
Herman Swartz	160
Russell Morrow	100
Harold W. Davis	120
Roland Yates	180
George F. Davis	80
L. G. Clinkenbeard	323
Tom Kirby	80
Paul Reiman	80
Lester Hutchison	164
Spencer McKeehan	195
Chas. H. Smith (Agent)	520
David Probasco	152
J. E. McKenzie	332
C. E. Trimble	278
Total -----	3561

Group VI

Harold R. Rice	160
L. E. Wallace	220
G. W. Wallace	160
W. B. Dudley	80

Wayne A. Carr	30
Beck & Needham	620
F. L. Sawyers	983
Robert Valentine	200
Glenn May	55
William Streepy	200
Carl Dudley-Operator	
Daisy Streepy	120
Wm. Sapp	130
R. E. Dudley	230
Total -----	3188

Group VII

Ralph L. Turner	450
Floyd Ransom	200
Trenton Wilson	310
Karl H. Fischer	170
R. C. Wilson	530
George Turner	440
L. N. Carter	80
Theo A. Miller	120
Earl A. Boyer	195
Forrest Main	240
Total-----	2735

Group VIII

George Scott	170
C. W. Howell & R. F. Bear	840
Lee R. Benz	160
Ross Starks	135
Doyle Hampton	320
Milo Walker	400
Alva Cridlebaugh	190
Virgil Dooley	96
Paul Cridlebaugh	240
Total-----	2551

Group IX

J. F. Hudson	320
Herbert Hart	120
H. L. Besse & Ira Besse	140
Ralph Wood	100
Issac Henderson	60
W. H. Neighbors	60
F. G. Ireland	400
Total-----	1200

Represented in these five groups are 58 applications comprising 13235 acres as a part of the 83 applications on hand. The balance of the 83 applications not listed herein are for partially formed groups 10-11-12 which have not as yet been completed, one of which is in Washington Township and two in Sharon Township.

TABLE I

1945 Annual Report of Practices Planned and Established
by the Appanoose County Soil Conservation District.

	: Unit:	: 1944	: January	: July Thru	: 1945	: Total	: Practices	: To Date	
	: Practices	: Practices	: Practices	: Practices	: Practices	: Practices	: Practices	: Practices	
	: Planned	: Established	: Planned	: Established	: Planned	: Established	: Planned	: Established	
Contour Planting	:Acs.: 632:	0: 1063:	446: 214:	0: 1277:	446: 1909:	446:			
Strip Cropping	:Acs.: 43:	0: 0:	10: 0:	0: 0:	10: 43:	10:			
Fertilizer(Cropland)	:Acs : 967:	0: 1367:	510: 288:	0: 1655:	510: 2622:	510:			
Fertilizer(Pasture)	:Acs : 494:	0: 714:	55: 63:	0: 777:	55: 1271:	55:			
Liming Pastures	:Acs : 440:	0: 612:	40: 23:	0: 635:	40: 1075:	40:			
Seeding Pastures	:Acs : 484:	0: 955:	136: 103:	0: 1058:	136: 1542:	136:			
Farm Ponds	:No : 7:	0: 0:	0: 1:	0: 1:	0: 8:	0:			
Field & Gully Planting	:Acs : 0:	0: 4:	1: 0:	0: 4:	1: 4:	1:			
District Trees	:No : 200:	0: 1750:	700 : 0:	0: 1750:	700: 1950:	700:			
Open Ditch	:Cu : 0:	0: 660:	0: 0:	0: 660:	0: 660:	0:			
Outlets & Farm Water Course	:Acs : 7:	0: 24:	5: 4:	0: 28:	5: 35:	5:			
Outlets & Farm Water Course	:Ft. : 9200:	0:26850:	6000: 5200:	0:32050:	6000:41250:	6000:			
Terracing	:Acs : 8:	0: 21:	10: 0:	0: 21:	10: 29:	10:			
Contour Furrows & Ridges	:Acs : 28:	0: 51:	0: 0:	0: 51:	0: 79:	0:			
Open Ditch	:Ft. : 0:	0: 110:	0: 0:	0: 110:	0: 110:	0:			

	Applications To Date	Acres To Date
Applications Received	83	17813
Active Applications	40	9888
Plans Prepared and Signed	36	7130
Plans Cancelled	0	0
Plans Amended	0	0
Active Conservation Plans	36	7130
Combined Treatment	-	1569

Of the plans which have been prepared so far it will be seen from the table that fifteen special practices and soil treatments have been used. The greatest tendency has been toward contour plantings with 1909 acres of the 7130 acres planned set up to receive the special practice of contouring. It has been planned for 2622 acres of cropland to be phosphate fertilized and for approximately 1200 acres of pasture to be limed, fertilized and reseeded.

Two explanations might be in order at this time with regard to the few number of plans established on farms inasmuch as there are only 36 active plans for 21 months the district has been formed. However, in explanation of this fact it is to be remembered that the District was without a farm planner from September until the end of the year, and therefore only 29 plans were established on farms during 1945. Had there been a planner during the entire year it might have easily been possible for him to have had at least fifty or more plans in effect by the years end.

Another point as an explanation offered it will be noticed that the practices established column as compared with the practices planned column are considerably fewer. This again is because the district has been without a planner or a planners aide and the establishment of plans has been held back accordingly.

Much interest has been shown within the District toward the improvement of pastures therefore it has seemed worthwhile to set up a set of grazing plots. A pasture demonstration was started in the fall of 1944 on the H.E. Vinzant Farm five miles Southwest of Centerville in cooperation with the Appanoose County Farm Bureau, Centerville Association of Commerce and the Extension Service of Iowa State College. The area selected consisted of 19 acres. Two tons of limestone was applied, the land was plowed and an additional two tons of limestone and a 300# application of 0-20-0 superphosphate were applied, then the entire area was seeded to Balbo rye at the rate of one and one-half bushels per acre. This was done in the fall of 1944.

In the spring of 1945 with the help of Horace D. Cheney of the Iowa Agricultural Experiment Station, the 19 acre tract was divided into four equal sized pastures with an average of 4.8 acres in each. The four plots were fenced, water was piped to the area, tanks were installed in each plot, and seedings were made.

Expenses incurred in setting up the Grazing Test Plots were defrayed by contributions by the following organizations:

Area donated by-----	H. E. Vinzant
Lime and Phosphate (Credit for same was paid by the County AAA and the difference of same was paid by -----)	H. E. Vinzant
Cattle used for grazing by-----	H. E. Vinzant
Fencing including posts, wire, staples and labor for building by-----	Centerville Association of Commerce \$126.25
Water pipe, connections and labor for installing water system-----	Appanoose County Farm Bureau \$123.96
One Gate-----	Hawkeye Lumber Co.
One Gate-----	Fisher Lumber Co.
One Tank (Water)-----	Farmers Exchange Store
One Tank (Water)-----	Appanoose County Farm Bureau
Seed-----	Iowa Agricultural Extension Service

A great deal of appreciation is expressed toward the above organizations for their interest and contributions in helping make this project possible.

The following mixtures were seeded on the four plots on the 19th of March with no cultivation practice.

<u>Plot No. 1</u>	
Lincoln Bromegrass	12 lbs. per acre
Alfalfa (Montana)	8 " " "

<u>Plot No. 2</u>	
Orchard Grass	8 Lbs per acres
Korean Lespedeza	20 " " "

<u>Plot No. 3</u>	
Korean Lespedeza	20 lbs. per acre

<u>Plot No. 4</u>	
Sweet Clover	5 lbs. per acre
Red Clover	3 " " "
Alsike Clover	2 " " "
Timothy	5 " " "
Bluegrass (Kentucky)	4 " " "

Seed used was of high quality with excellent germination and purity tests.

In the spring of 1945 it was observed that a fine uniform stand of rye was present on all four plots from the fall seeding. Mr. Vinzant had

obtained 12 head of angus and four head of hereford steers to use for grazing the four pastures. These animals were weighed for three days to obtain an average initial weight and were turned onto the four plots on May 5th. Their average weight was 543# and one Hereford and three Angus steers were placed on each plot. They grazed for forty days on the rye or until June 14th then were weighed off the Grazing plots and placed into a bluegrass pasture, thus trying to follow a practice of management that a farmer would use during his first year with a renovated pasture.

On the 19th and 20th of July the rye had made sufficient growth and maturity to be harvested for seed and 33.8 bushels of rye were harvested from the four plots. The yield by plots was; Plot No. 1, 14.6 Bus.; Plot No. 2, 6.4 Bus.; Plot No. 3, 4.6 Bus.; and Plot No. 4, 8.1 Bus.

On the 31st of July Plot No. 1 was plowed. Such a poor stand of brome and alfalfa was obtained on this plot that it was felt not justifiable to continue with it so it was decided to plow and reseed it as soon in the fall as moisture conditions would allow. A good rain came on September 9th and on the 12th it was reseeded to alfalfa, and brome will be reseeded on this plot in the early spring of 1946.

On July 31 the steers were brought in off the bluegrass pastures, weighed again and those steers from plots 2-3-4 were turned back into their respective plots the same numbers as had been used per plot to graze the spring growth of rye. Animals from Plot No 1 were left on the large bluegrass pasture since Plot No. 1 had been plowed. The animals were left on plots 2-3-4 until September 10th at which time an average weight was taken and they were removed from the grazing test to allow the new seeding a chance to recover by fall before frost. The animals were removed to the large bluegrass pasture, and allowed to graze there until November 14th when they were sold. The four animals from Plot No. 1 which had grazed that plot only during the May 5th to June 14th period and were on the large bluegrass pasture the rest of the time, were sold to market on September 10th.

A record of weights of the animals were kept only from May 5th to September 10th or for a period of 128 days. A record of those weights will be found in Table II. It will be noted that the animals on Plot No. 4 made the greatest average daily gain of 1.89 pounds per animal for the 128 day period. Animals on Plot No. 2 made the second best gain of 1.70 pounds and Plots Nos. 3 and 1 were third and fourth respectively with a gain of 1.55 and 1.22 pounds per animal. No significant difference in gains from the results of the pasture seedings are concluded at this time.

This first year our chief interest has been in getting the stands of grasses and legumes established and in the best grazing management practices to follow which we think has been done properly by grazing the nurse crop off then removing the animals to allow the new seedlings to become established, come in and graze off the new growth of grasses and legumes, then remove the animals early enough in the fall to allow the new seedlings to store up a goodly portion of root reserves to carry them through the winter.

TABLE II

APPANOOSE COUNTY PASTURE DEMONSTRATION

Steer Weights and Gains

1945

Location: H.E. Vinzant Farm

		: Ave	: Ave	: Gain	: Ave	: Gain	: Ave	: Gain	: 128	:
		: May	: June	: May 5	: July	: June	: Sept	: July	: days	:
		: 5	: 14	: to	: 31	: 14	: 10	: 31	: Gain	:
Plot & Steer Nos:				: June		: to		: to	: 5 May	:
				: 14		: July		: Sept	: to	:
						: 31		: 10	: Sept 10	:
Plot 1	16 H	: 395:	438	: 43	: 522	: 84	: 575	: 53	: 180	:
	21 A	: 610:	645	: 35	: 710	: 65	: 735	: 25	: 125	:
	46 A	: 547:	575	: 28	: 630	: 55	: 675	: 45	: 128	:
	60 A	: 613:	645	: 32	: 713	: 68	: 785	: 72	: 172	:
		: 2165:	2303	: 138	: 2575	: 272	: 2770	: 195	: 605	: Ave Daily Gain: 1.22
		:	:	:	:	:	:	:	:	:
Plot 2	18 H	: 602:	670	: 68	: 715	: 45	: 780	: 65	: 178	:
	20 A	: 522:	565	: 43	: 638	: 73	: 705	: 67	: 183	:
	52 A	: 482:	528	: 46	: 575	: 47	: 650	: 75	: 168	:
	61 A	: 582:	647	: 65	: 685	: 38	: 750	: 65	: 168	:
		: 2188:	2410	: 222	: 2613	: 203	: 2885	: 272	: 697	: Ave Daily Gain: 1.70
		:	:	:	:	:	:	:	:	:
Plot 3	67 H	: 450:	530	: 80	: 575	: 45	: 645	: 70	: 195	:
	13 A	: 570:	615	: 45	: 637	: 22	: 665	: 28	: 95	:
	42 A	: 548:	598	: 50	: 620	: 22	: 675	: 55	: 127	:
	43 A	: 580:	642	: 62	: 640	: -2	: 735	: 95	: 155	:
		: 2148:	2385	: 237	: 2472	: 87	: 2720	: 248	: 572	: Ave Daily Gain: 1.55
		:	:	:	:	:	:	:	:	:
Plot 4	14 H	: 505:	553	: 48	: 600	: 47	: 710	: 110	: 205	:
	44 A	: 632:	645	: 13	: 665	: 20	: 745	: 80	: 113	:
	47 A	: 477:	495	: 18	: 562	: 67	: 605	: 43	: 128	:
	48 A	: 567:	607	: 40	: 655	: 48	: 725	: 70	: 158	:
		: 2181:	2300	: 119	: 2482	: 182	: 2785	: 303	: 604	: Ave Daily Gain: 1.89

In early summer or the fore part of July it was observed that a very thin stand of orchard grass was present in Plot No. 2. Some consideration was given to plowing this plot but later it was decided to leave as was planning to seed additional orchard grass in the plot in the spring of 1946.

A fall seeding of rye for a nurse crop was made on the newly seeded alfalfa plot No. 1 on October 13th at the rate of two bushels per acre.

In spite of having lost the seeding on Plot No. 1 and ending up with a poor stand of orchard grass on Plot No. 2, it is felt that much progress has been made with the Grazing Test during its first year in operation. An excellent stand of Lespedeza was obtained on Plots Nos. 2 and 3 and although it was grazed closely during the month of August and fore part of September, it is felt it set and matured sufficient seed for reseeding itself the ensuing spring.

With regard to meetings which have been held within the Soils District this year it is reported that on February 8, 1945, Morris E. Mortimer, Farm Planner of Decatur County spoke to a group of farmers interested in soil conservation practices. There was an attendance of 42 representing 13 of the 17 townships in Appanoose County. We showed a set of colored slides representing good and poor conservation practices as found in Decatur, Ringgold and Wayne Counties. Much interest was shown in this meeting and it was proposed to hold one such meeting annually.

On October 11, 1945, Prof H. D. Hughes, M. L. Peterson, Dr. W. H. Pierre of the Iowa Agricultural Experiment Station, Ames, Iowa; M. A. Hein of the Bureau of Plant Industry, Washington, D.C.; E. Marion Brown of the Missouri Agricultural Experiment Station, Columbia, Missouri; Harold M. Anderson, Farm Planner, Albia, Iowa; and Parks Forster, District Conservationist, Fairfield, Iowa; visited the County to make an extensive tour of Lespedeza, Reeds Canary Grass, Brome Grass, Ladino Clover, and Birdsfoot Trefoil plantings. Farms visited were those of R. E. Bear, Paul Strickler, R. C. Wilson, C. W. Powell, H. O. Kelly, George Scott and Ross Stark. The Appanoose County Pasture Demonstration on the H. E. Vinzant Farm was also visited.

At various intervals Prof H. D. Hughes and Horace B. Chency of Iowa State College visited the County Pasture Demonstration Plots on the Vinzant Farm to make observations and recommendations as to the new seedings and grazing of the plots.

Requests for the use of heavy construction equipment in the county for digging farm ponds, drainage ditches, and for filling open gullies and building diversion ditches, have been numerous.

Attempts by the Commissioners and the District Conservationist to obtain heavy equipment for these uses have been to no avail. New equipment has not

been available and most contractors have been so busy with what they thought was essential construction that they would not pull into the county. Obtaining a working agreement with a contractor with good equipment and keeping him busy is under consideration at present and it is felt certain that equipment will be working within the District by the early spring of 1946.

Due to the scarcity of seed of the new strains of brome grass, Fisher, Lincoln and Achenbach, an attempt has been made to establish some brome seedlings within the county for seed increase. Seed was obtained for three plantings on the R. C. Wilson, Robert Dudley, and Pete Sidles Farms. Very poor results have been obtained. R. C. Wilsons plot contained too much downy brome to certify. Robert Dudleys field contained too much sour dock to harvest the brome for seed and Pete Sidles discovered his seed contained a great amount of downy brome grass before he seeded it so did not make his seeding. A further attempt to obtain seed and establish brome grass seedlings will be made in the spring of 1946.

An exhibit was set up at the local county fair on August 21-24 inclusive by the Appanoose County Soil Conservation District. The exhibit consisted of bundles of various grass and legume species which it was felt would be adaptable to Appanoose County soil and climatic conditions. Since the trend of the farmers in this county is toward a permanent vegetative type of farming instead of grain farming, this exhibit aroused considerable interest and enthusiasm from the farmers and much comment was made about it after the show.

Thus after twenty-one months of operation the Appanoose County soil Conservation District is under way with considerable interest and enthusiasm for the job it has ahead. Although the progress has been slow to date due to being without a farm planner for a considerable period of time it is understood that one will be assigned to this county on or about January 1, 1946, and the ground work is well laid for the work to progress favorably in 1946.

R. C. Wilson

R. C. Wilson
Chairman, District Governing Body