

RESERVOIR SEDIMENTATION
DATA SUMMARY

Roe Farm Pond

35-24 a

NAME OF RESERVOIR
Unnamed tributary

DATA SHEET NO.

DAM	1. OWNER <u>Art. Roe</u>				2. RIVER <u>of Turkey Creek</u>		3. STATE <u>Nebraska</u>								
	4. SEC. N <u>1/4 TWP. 14</u> RANGE <u>11</u>			5. NEAREST TOWN <u>Dannebrog</u>		6. COUNTY <u>Howard</u>									
	7. STREAM BED ELEV.				8. TOP OF DAM ELEV.		9. SPILLWAY CREST ELEV.								
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. SURFACE AREA ACRES		13. STORAGE ACRE- FEET		14. ACCUMULATED ACRE- FEET		15. DATE STORAGE BEGAN				
	a. FLOOD CONTROL										Aug. 1948				
	b. POWER														
	c. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION														
	e. CONSERVATION		Original capacity was not computed,												
	f. INACTIVE		but it is estimated to be near 1 A.F.												
17. LENGTH OF RESERVOIR		250'		AV. WIDTH OF RESERVOIR		50'									
WATERSHED	18. TOTAL DRAINAGE AREA				0.18		SQ. MI.		22. MEAN ANNUAL PRECIPITATION <u>2/ 23.42 (57)</u> INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA				0.18		SQ. MI.		23. MEAN ANNUAL RUNOFF <u>1.00 1/</u> INCHES						
	20. LENGTH		0.5		MILES		AV. WIDTH		.25		MILES		24. MEAN ANNUAL RUNOFF <u>9.6</u> AC.-FT.		
	21. MAX. ELEV.				MIN. ELEV.				25. CLIMATIC CLASSIFICATION <u>Sub-humid</u>						
	26. DATE OF SURVEY		27. PERIOD YEARS		28. ACCL. YEARS		29. TYPE OF SURVEY		30. NO. OF RANGES OR CONTOUR INT.		31. SURFACE AREA ACRES		32. CAPACITY ACRE- FEET		33. C/W RATIO AC.-FT. PER SQ. MI.
Jul. 1947		-		-		-		-		-		1.0		5.6	
Aug. 1953		5		5		Recon.		33(M)		0.29		0.643		3.6	
SURVEY DATA	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW ACRE- FEET				36. WATER INFL. TO DATE AC.-FT.						
					a. MEAN ANNUAL		b. MAX. ANNUAL		c. PERIOD TOTAL		d. MEAN ANNUAL		e. TOTAL TO DATE		
	Aug. 1953		22.46 <u>2/</u>		-		-		-		-		-		
26. DATE OF SURVEY		37. PERIOD SEDIMENT DEPOSITS ACRE- FEET				38. TOTAL SED. DEPOSITS TO DATE ACRE- FEET.									
		a. PERIOD TOTAL		b. AV. ANNUAL		c. PER SQ. MI.-YEAR		d. TOTAL TO DATE		e. AV. ANNUAL		f. PER SQ. MI.-YEAR			
Aug. 1953		0.357		0.071		0.39		0.357		0.071		0.39			
26. DATE OF SURVEY		39. AV. DRY WGT. LBS. PER CU. FT.		40. SED. DEP. TONS PER SQ. MI.-YR.		41. STORAGE LOSS PCT.		42. SED. INFLOW PPM							
		a. PERIOD		b. TOTAL TO DATE		a. AV. ANNUAL		b. TOT. TO DATE		c. PERIOD		d. TOT. TO DATE			
Aug. 1953		65*		552		552		7.1		35.7		-			

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION														
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.								
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES															
<p>*Assumed dry wt. of one cubic-foot of silt.</p> <p>1/ Mean annual runoff - Colby & Oltman.</p> <p>2/ Annual precipitation - Loup City Rainfall Record.</p> <p>3/ Since the spillway was washed considerably on this structure, the original capacity was not computed.</p>															
48. AGENCY SUPPLYING DATA					SCS, Lincoln, Nebraska		49. DATE		Dec. 7, 1954						