

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Cowbell Lake - Red Lick W/S

SCS-34 Rev. 6-66

NAME OF RESERVOIR

19 - 57

DATA SHEET NO.

DAM	1. OWNER Berea College			2. STREAM Cowbell Creek			3. STATE Kentucky					
	4. SEC. TWP. RANGE			5. NEAREST P.O. Big Hill			6. COUNTY Madison					
	7. LAT. 37°32'20" LONG 84°13'39"			8. TOP OF DAM ELEVATION 998.8			9. SPILLWAY CREST ELEV. 992.6					
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES		13. ORIGINAL CAPACITY, ACRE-FEET		14. GROSS STORAGE, ACRE-FEET		15. DATE STORAGE BEGAN	
	a. FLOOD CONTROL										1954	
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY		992.6		20.5		511.8		511.8		16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION										1954	
	f. CONSERVATION											
	g. INACTIVE											
WATERSHED	17. LENGTH OF RESERVOIR 0.36 MILES				AV. WIDTH OF RESERVOIR 0.09 MILES							
	18. TOTAL DRAINAGE AREA (704 ac.) 1.10 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 47.5 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 1.07 SQ. MI.				23. MEAN ANNUAL RUNOFF 19 INCHES							
	20. LENGTH 1.25 MILES		AV. WIDTH .88 MILES		24. MEAN ANNUAL RUNOFF 1115 AC. FT.							
	21. MAX. ELEV. 1557		MIN. ELEV. 992.6		25. ANNUAL TEMP: MEAN 76.48° July RANGE 37.10° Jan. Below 0° F to 100° F							
SURVEY DATA	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/I. RATIO, AC.-FT. PER AC.-FT.			
	1954		-	-		-	20.5	511.8	0.46			
	9/26/74		20	20	Range	4-R	20.4	505.5	0.45			
	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	a. MEAN ANNUAL	b. TOTAL TO DATE			
	9/26/74		47.5		1115	-	22300	1115	22300			
	26. DATE OF SURVEY		37. PERIOD CAPACITY LOSS, ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE, ACRE-FEET						
			a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR				
	9/26/74		6.30	0.32	0.29	6.30	0.32	0.29				
	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. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE					
9/26/74		64	411.1	411.1	0.06	1.23	0.12	286.08				

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, 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														
9/26/74	5	21	16	11	15	21	8	2	0.5	0.5					
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															
The total drainage area is in forest cover. Water quality is reported to be excellent.															
48. AGENCY MAKING SURVEY															
49. AGENCY SUPPLYING DATA Soil Conservation Service															
50. DATE _____															