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Table 1. General subject matter areas of the papers presented at the 1933 meeting of the American Fisheries Society.

Subject Matter	Number of Publications
Hatchery production of salmonids	5
Hatchery production of warm-water fish	7
Biology of rainbow trout	5
Biology of largemouth bass	2
Biology of other species	11
Limnology	2
Effect of pollution on fish	1
Stream improvement	1
Tagging studies	4
Oyster farming	1

Table 2. Fish stocked in Lake Auburn in 1932 and 1933.

Time	Species	Number	Size
Spring, 1932	Bluegill sunfish	121	Adults
	Shellcracker sunfish	49	Adults
July, 1932	Bluegill sunfish	1,250	Fingerlings
October, 1932	Bluegill sunfish	1,000	Fingerlings
	Red-eye bass	250	Fingerlings
March, 1933	Smallmouth bass	2	Adults
	Golden shiners	200	Fingerlings
	<i>Gambusia</i>	3,000	Adults
May, 1933	Largemouth bass	6	Adult

Table 3. Fish stocked and recovered in Farm Pond 1 in 1934.

Species	Fish Stocked^a	Fish Recovered^b
	Number	Number
Bluegills (Adult)	5	6
Bluegill (Young)		3,615^c
Red-eye bass (Adults)	12	7
Red-eye bass (Young)		16
Shellcrackers (Adults)	17	6
Yellow bullheads (Adults)	5	6
Yellow bullheads (Young)		292

^aFish stocked during the period May 5-30, 1934. No weights given.

^bFish removed October, 1934. No weights given.

^cNumber includes young of both bluegill and shellcrackers. "Investigators" could not separate the two.

Table 4 . Quantities of each fertilizer added to each of 20 'D' Ponds in Experiment 1 in 1935.

Grams of Fertilizer Added^a				
Pond Number	Superphosphate	Nitrate of Soda	Muriate of Potash	Calcium Carbonate
1	1225.8	1589.0	522.0	681.0
2	"	"	"	"
3	"	"	"	"
4	"	"	"	"
5	0	0	0	0
6	817.2			454.8
7	"			"
8	"	1044.2		"
9		"		
10		"		
11	0	0	0	0
12	817.2	1044.2		
13	"	"	345.0	454.0
14	LM	LM	LM	LM
15	817.2	1044.2	345.0	454.0
16	"	"	"	"
17	"	"	"	"
18	"	"	"	"
19	454.0	653.6	209.0	272.0
20	"	"	"	"

^aFertilizers added to provide 10 p.p.m of N, P, K or Ca to ponds.

Table 5. Dried organic matter (mg/L) in water samples taken from individual 'D' Ponds in pond fertilization experiment in 1935.

Pond Number	Organic Matter Recovered in 'D' - Pond Water Samples				
	Sampling Dates				
	June 20	June 27	July 5	July 18	Average
1	17.1	15.0	5.1	2.1	9.8
2	12.6	2.5	2.4	1.4	4.7
3	15.2	4.9	2.1	1.5	5.9
4	20.6	10.7	4.8	2.9	9.8
5	2.0	8.1	1.5	2.1	3.4
6	3.4	4.9	4.4	3.9	4.2
7	2.9	2.8	2.4	7.7	4.0
8	14.3	24.7	2.8	7.4	12.5
9	2.0	1.8	2.0	9.4	3.8
10	2.5	1.9	0.4	7.0	3.0
11	1.5	0.8	1.5	5.0	2.2
12	3.3	11.9	7.0	7.0	7.3
13	12.6	9.5	7.5	2.9	8.1
14	3.9	4.8	2.3	0.3	2.8
15	10.6	41.5	2.4	4.0	14.5
16	5.5	25.3	5.8	4.5	10.3
17	6.1	23.4	2.9	2.1	8.6
18	10.5	22.5	6.5	3.1	10.7
19	6.6	6.4	2.3	9.8	6.3
20	6.1	3.5	1.7	2.8	3.5
Average	7.96	11.34	3.39	4.34	

Table 6. Dried organic matter (mg/L) in water samples taken from eleven 'D' Ponds on four sampling dates in 1935 (Experiment 1).

Fertilization Rate	Pond Number	Sampling Date				Average
		June 20	June 27	July 5	July 18	
'High'	1	17.1	15.0	5.1	2.1	9.82
"	2	12.6	2.5	2.4	1.4	4.72
"	3	15.2	4.9	2.1	1.5	5.92
"	4	20.6	10.7	4.8	2.9	9.75
Average		16.38	8.28	3.60	1.98	7.55
'Medium'	13	12.6	9.3	7.5	2.9	8.08
"	15	10.6	41.5	2.4	4.0	14.62
"	16	5.5	25.3	5.8	4.5	10.28
"	17	6.1	23.4	2.9	2.1	8.62
"	18	10.5	22.5	6.5	3.1	10.65
Average		9.06	24.40	5.02	3.32	10.45
'Low'	19	6.6	6.4	2.3	9.8	6.28
"	20	6.1	3.5	1.7	2.8	3.52
Average		6.35	4.95	2.00	6.30	4.90

Table 7. Dried organic matter (mg/L) recovered 'D' Ponds fertilizer experiments (Experiment 2 of 1935) conducted – September 9, 1935-May 1, 1936. This is the first phase of this experiment in which the sampling was done with 'dippers.'

Pond No.	Fertilizer Mixture	Sep 30	Sep 27	Oct 4	Oct 10	Avg.
1	Superphosphate, Nitrate of soda and Calcium carbonate	260.8	133.9	162.6	156.8	178.5
2	Superphosphate, Nitrate of soda, Muriate of potash and Calcium carbonate	145.3	287.6	128.1	477.4	259.6
3	Superphosphate,, Nitrate of soda and Muriate of potash	311.4	356.1	262.0	247.8	294.3
4	Superphosphate and Nitrate of soda	10.8	31.4	10.6	3.5	14.1
5	No fertilizer	3.5	2.9	3.0	2.3	2.9
6	Superphosphate	2.1	2.4	2.1	0.6	1.8
7	Superphosphate and Ammonium phosphate	53.9	50.0	182.9	124.9	102.9
8	Ammonium phosphate (11%) and Calcium carbonate	189.4	194.0	85.8	49.5	129.7
9	Ammonium phosphate	138.9	203.9	36.6	24.0	100.9
10	Nitrate of soda	7.0	7.1	2.1	1.6	4.5
11	No fertilizer	2.0	3.8	2.9	1.5	2.6
12	Ammonium phosphate and Calcium sulfate	267.1	97.3	34.8	50.4	112.4
13	Calcium nitrate	3.1	3.0	1.8	24.6	8.1
14	Superphosphate and Calcium nitrate	12.2	10.4	1.6	50.5	18.7
15	Laying mash, weekly	1.4	2.0	16.9	95.6	29.0
16	Superphosphate, Nitrate of soda and Muriate of potash	21.0	10.6	12.9	53.1	24.4
17	“ “	77.0	131.9	28.0	107.0	86.0
18	“ “	31.7	31.6	4.1	2.9	17.6
19	“ “	28.6	75.8	65.5	2.4	60.7
20	“ “	99.3	174.5	25.0	11.3	77.5
Avg.		83.32	90.51	53.46	74.38	

Table 8. Dried organic matter recovered (mg/L) from ‘D’ Ponds fertilizer experiments conducted – September 9, 1935-May 1, 1936. Pond drained May 1, 1936. Sampling done with a specially designed sampling device (Phase 2 of Experiment 2)

Pond No.	Fertilizer Mixture	Nov 11	Nov 15	Nov 22	Dec 5	Dec 13	Avg.
1	Superphosphate, Nitrate of soda and Calcium carbonate	15.7	13.0	9.5	4.3	3.5	9.2
2	Superphosphate, Nitrate of soda, Muriate of potash and Calcium carbonate	15.0	20.9	32.3	23.6	3.2	19.0
3	Superphosphate,, Nitrate of soda and Muriate of potash	15.7	6.4	9.8	1.5	3.2	7.3
4	Superphosphate and Nitrate of soda	11.3	16.0	17.0	5.5	2.0	10.4
5	No fertilizer	3.0	8.1	6.4	2.8	5.5	5.2
6	Superphosphate	2.4	3.1	5.6	4.6	3.3	5.8
7	Superphosphate and Ammonium phosphate	8.8	19.4	12.9	24.9	24.0	18.0
8	Ammonium phosphate (11%) and Calcium carbonate	12.4	16.3	23.0	14.9	5.9	14.5
9	Ammonium phosphate	10.6	9.5	10.3	8.3	11.2	10.0
10	Nitrate of soda	7.0	9.3	8.0	4.3	5.7	6.9
11	No fertilizer	6.9	9.6	7.9	6.1	5.3	7.2
12	Ammonium phosphate and Calcium sulfate	33.4	20.3	33.1	15.4	15.4	23.5
13	Calcium nitrate	4.0	4.4	7.1	3.6	5.0	4.8
14	Superphosphate and Calcium nitrate	10.0	7.6	10.1	4.4	6.8	7.8
15	Laying mash, weekly	5.9	4.1	4.3	2.6	2.0	3.8
16	Superphosphate, Nitrate of soda and Muriate of potash	7.3	8.8	20.8	19.9	6.5	12.7
17	“ “	10.5	11.0	7.1	3.6	3.3	7.1
18	“ “	10.4	10.6	23.0	15.6	8.2	13.6
19	“ “	24.6	22.8	30.9	73.0	2.5	30.8
20	“ “	12.9	6.6	9.5	12.9	2.9	9.0

Table 9. Levels of some chemical characteristics of water taken from the 'D' Ponds during the 1935 pond fertilization experiment.

Pond Number	pH Values					Phosphate (Parts per Million)				
	9/18	10/16	11/8	12/3	Avg.	9/18	10/16	11/8	12/3	Avg.
1	6.5	6.7	6.6	7.2	6.75	0.2	0.0	1.6	0.0	0.45
2	6.6	7.1	6.7	7.5	6.98	1.2	0.0	2.0	0.1	0.83
3	5.9	6.5	6.9	6.9	6.55	1.3	0.3	1.7	0.6	0.98
4	5.9	7.1	7.0	6.9	6.73	2.2	0.6	2.0	1.3	1.53
5	6.0	6.2	6.6	6.9	6.43	0.2	0.0	0.0	0.0	0.05
6	5.6	6.7	6.1	6.3	6.18	3.7	0.3	8.3	0.2	3.13
7	4.2	4.0	4.0	4.5	4.18	5.1	0.2	4.7	0.7	2.68
8	6.1	6.9	6.8	6.6	6.60	15.3	1.9	14.3	2.5	8.50
9	4.9	5.6	5.9	5.3	5.43	0.2	2.1	10.4	1.2	3.48
10	6.1	6.5	6.7	6.7	6.50	0.1	0.0	0.0	0.0	0.03
11	6.1	6.5	6.7	6.7	6.50	0.1	0.0	0.0	0.0	0.03
12	4.5	6.4	5.8	5.9	5.65	15.8	3.3	18.0	2.3	9.85
13	5.9	6.3	6.4	6.6	6.30	0.1	0.0	0.0	0.0	0.03
14	6.1	6.9	6.9	6.9	6.70	2.4	0.2	5.8	0.2	2.15
15	6.2	6.9	7.1	7.0	6.80	0.2	0.0	0.0	0.0	1.05
16	5.8	7.1	5.5	6.6	6.25	1.3	0.2	4.0	1.0	1.63
17	6.0	7.1	6.9	7.0	6.75	2.1	0.0	3.6	0.6	1.58
18	5.9	7.2	7.0	6.9	6.75	1.7	0.0	3.7	0.2	1.40
19	6.4	7.0	6.9	6.9	6.80	2.6	1.0	4.5	0.6	2.18
20	6.2	7.1	6.8	6.9	6.75	1.4	0.2	7.1	0.1	2.20
Avg.	5.84	6.59	6.47	6.61		2.86	0.52	4.59	0.58	

Table 10. Some chemical characteristics of water samples collected from the 'D' Ponds, Second Experiment 1935. Water samples taken during Phases 1 and 2.

Pond Number	Nitrates (Parts per Million)					Ammonia (Parts per Million)			
	<u>Sampling Dates</u>					<u>Sampling Dates</u>			
	9/18	10/16	11/8	12/3	Avg.	10/16	11/8	12/3	Avg.
1	1.0	0.0	2.0	0.0	0.08	1.4	2.9	0.6	1.63
2	2.4	0.0	4.5	0.0	1.73	0.2	0.4	0.4	0.33
3	3.2	0.0	2.8	0.0	1.50	0.0	0.3	0.0	0.10
4	5.0	0.0	5.1	0.0	2.53	0.3	0.3	0.0	0.20
5	0.0	0.0	0.0	0.0	0.00	0.0	0.3	1.2	0.50
6	0.0	0.0	0.0	0.0	0.00	0.0	0.5	0.0	0.17
7	0.0	0.0	0.0	0.0	0.00	0.9	4.5	3.6	3.00
8	0.0	0.0	0.0	0.0	0.00	0.2	4.5	0.0	1.57
9	0.0	0.0	0.0	0.8	0.20	0.0	4.5	3.2	2.57
10	5.2	0.0	5.5	0.0	2.68	0.2	0.7	0.3	0.40
11	0.0	0.0	0.0	0.0	0.00	0.1	0.4	1.2	0.57
12	0.0	0.0	0.0	0.0	0.00	2.0	5.0	5.0	4.00
13	5.2	0.0	5.7	0.0	2.73	0.0	0.6	0.4	0.33
14	2.0	0.0	5.7	0.5	2.05	0.0	0.5	1.4	0.63
15	0.0	0.0	0.0	0.4	0.10	0.2	0.4	0.0	0.20
16	5.6	0.0	7.2	0.0	3.20	0.2	0.3	0.6	0.37
17	4.0	0.0	7.2	0.0	2.80	0.3	0.3	1.3	0.63
18	4.4	0.0	7.2	0.0	2.90	0.5	0.3	1.1	0.63
19	3.2	0.0	4.8	0.0	2.00	0.3	0.3	1.0	0.53
20	3.0	0.0	4.8	0.0	1.95	0.3	0.3	1.0	0.53
Avg.	2.21	0.00	3.13	0.09		0.36	1.37	1.12	

Table 11. Fish stocked and recovered in/from Farm Pond 1 in 1935.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^d
Bluegills (Adults)	13		11	4.56
Bluegills (Sub-adults)	3,615 ^e		1,808 ^e	89.56
Bluegills (Small)			14,203 ^f	30.12
Red-eye bass (Adults)	13		12	12.69
Red-eye bass (Sub-adults)	16 ^e		17 ^f	2.5
Yellow bullheads (Adults)	6		16 ^g	10.31
Yellow bullheads (Sub-adults)	292 ^e		170 ^g	40.44
Yellow bullheads (Small)			1,174 ^f	25.06
Chub suckers	520		4,704 ^g	78.00
Total pounds of fish recovered				293.24

^aFish in pond at beginning of 1935.

^bFish recovered in December 1935.

^cNo weights recorded.

^dWeight in pounds.

^e1934 year-class.

^f1935 year-class.

^gIncludes some fish from 1935 year-class.

Table 12. Kind and number of animals stocked in the 'Upper' Sand Mountain Pond in 1935.

Animal Stocked	Number
Bullfrogs (Adult)	11
Bluegill sunfish (Adult)	17
Bullheads (Adult)	11
Golden shiners (Adult)	12
Largemouth bass (Fingerlings)	180^a

^aStocked in August 1935.

Table 13. Phytoplankters identified in water samples taken from the “D” Ponds during the period January 3 to March 27, 1936. These ponds were filled with water around September 9, 1935 and fertilized as shown in Table 4.

Taxa	Number^a	Taxa	Number^a
Diatoms	80	<i>Coelastrum</i>	14
<i>Euglena</i>	25	<i>Oedogonium</i>	14
<i>Dinobryon</i>	18	<i>Chlamydomonas</i>	13
<i>Chlorella</i>	16	<i>Ankistrodesmus</i>	11
<i>Scenedesmus</i>	15	<i>Pandorina</i>	11
<i>Spirogyra</i>	15	<i>Mougeotia</i>	9

^aNumber of the 120 “sample date - pond number” samples containing each taxon.

Table 14. Stocking Pond C-1 with adult bluegills. Stocked early spring of 1936. Fertilized with ammonium phosphate and muriate of potash.

Fish Stocked ^a			Fish Recovered ^b		
	Number	Weight (Pounds)		Number	Weight (Pounds)
Bluegills			Bluegills		
Adults	10 ^c	2.25	Adults	10 ^d	4.6
			Fingerlings	106	0.82
			Fry	12,251	19.0

^aC'-1 used as a brood pond in 1936; stocked in early spring.

^bFish recovered November 19, 1936.

^cPond stocked with 5 males and 5 females.

^dRecovered 5 males and 5 females on draining.

Table 15. Dried organic matter (mg/L) in water samples taken from the ‘D’ Ponds on seven different days in 1936. The ponds were filled with water around September 9, 1935, and fertilized as shown in Table 4. These samples were collected with the special sampling device.

Pond No.		Jan 17	Jan 21	Feb 14	Feb 28	Mar 13	Mar 27	Apr 8	Avg.
1	Superphosphate, Nitrate of soda, and calcium carbonate	5.5	13.4	5.8	11.4	3.9	2.1	6.4	6.9
2	Superphosphate, Nitrate of soda, Muriate of potash and Calcium carbonate	10.5	4.6	17.1	27.6	36.8	8.4	17.8	17.5
3	Superphosphate, Nitrate of soda and Muriate of potash	3.5	3.0	36.4	10.9	4.1	2.4	5.1	9.3
4	Superphosphate and Nitrate of soda	2.8	4.0	3.9	8.4	5.8	3.7	3.1	4.5
5	No fertilizer	5.8	6.6	9.0	7.7	2.4	2.5	5.2	5.6
6	Superphosphate	1.8	2.6	2.6	5.6	7.2	4.7	2.6	3.9
7	Superphosphate and Ammonium sulfate	4.9	6.0	13.7	9.1	21.5	2.6	4.7	8.9
8	Ammonium phosphate and Calcium carbonate	4.2	11.9	8.1	10.4	11.5	37.3	16.4	14.3
9	Ammonium phosphate	7.3	9.6	20.3	14.4	17.2	6.9	7.9	11.9
10	Nitrate of soda	4.6	3.4	1.8	4.6	2.0	2.9	5.4	3.5
11	No fertilizer	4.8	1.3	3.2	4.5	2.2	4.3	7.4	4.0
12	Ammonium phosphate (11 %) and Calcium carbonate	9.8	12.1	11.4	16.4	18.7	43.2	11.0	17.5
13	Calcium nitrate	2.9	2.0	2.9	5.7	4.5	8.5	4.9	4.5
14	Superphosphate and Calcium nitrate	7.7	13.3	4.3	8.4	12.2	8.3	6.2	8.6
15	Laying mash, weekly – One pound	5.5	4.4	4.8	7.4	6.3	2.2	11.5	6.0
16	Superphosphate,, Nitrate of soda and Muriate of potash	2.4	3.0	8.9	12.4	7.3	7.8	5.0	6.7
17	“ “	3.6	4.0	7.1	11.8	5.3	4.5	5.6	5.9
18	“ “	2.8	8.0	5.6	11.2	27.0	16.5	6.2	11.0
19	“ “	43.0	4.2	34.6	18.4	23.9	54.6	36.9	30.8
20	“ “	4.5	3.7	9.7	8.8	6.6	5.7	9.2	6.9
Avg.		6.89	6.05	10.56	11.76	11.32	11.46	8.92	

Table 16. Dried Organic matter (mg/L) and fish production (Pounds per Acre) in the 'D' Ponds, Experiment 2 (September 9, 1935-May 1, 1936). All ponds except 2 and 17 stocked with 100 bluegill fingerlings each on September 9, 1935. Ponds 2 and 17 stocked with 200 recently hatched fry each on the same day.

Pond No.	Fertilizer Mixture	Organic Matter Production ^a	Fish Production (Pounds/Acre)
1	Superphosphate, Nitrate of soda and Calcium carbonate	94.5	165.1
2	Superphosphate, Nitrate of soda, Muriate of potash and Calcium carbonate	217.8	330.1 2/
3	Superphosphate,, Nitrate of soda and Muriate of potash	101.3	251.9
4	Superphosphate and Nitrate of soda	83.7	156.4
5	No fertilizer	65.2	188.5
6	Superphosphate	46.1	134.6
7	Superphosphate and Ammonium phosphate	152.5	174.6
8	Ammonium phosphate (11%) and Calcium carbonate	172.3	355.6
9	Ammonium phosphate	133.6	292.2
10	Nitrate of soda	59.2	79.0
11	No fertilizer	63.7	90.3
12	Ammonium phosphate and Calcium sulfate	240.1	131.7
13	Calcium nitrate	55.4	79.0
14	Superphosphate and Calcium nitrate	99.4	183.8
15	Laying mash, weekly	61.1	333.9
16	Superphosphate, Nitrate of soda and Muriate of potash	110.3	224.2
17	“ “	76.5	374.9 ^b
18	“ “	145.3	196.6
19	“ “	369.6	248.1
20	“ “	93.2	274.2
Avg.		122.04	213.24

^aTotal organic matter (Mg/L) in all water samples collected from each of 20 ponds, during the period November 11, 1935 through April 8, 1936 (See Tables 9 and 15).

^bPonds stocked with 200 bluegill fingerlings.

Table 17. Average quantity of dried organic matter (mg/L) recovered from water samples collected from the 'D' Ponds during the period May 22 through November 18, 1936. Data also include the production of fish (Pounds per Acre) resulting for stocking of the ponds at two different rates and sizes of fish.

Pond	Stocking	Fertilizer ^a	Plankton ^b	Fish ^c
PONDS STOCKED WITH 100 BLUEGILL FINGERLINGS^d				
5	100	None	5.1	92.7
13	“	Ammonium phosphate	18.3	312.0
12	“	Ammonium phosphate and Calcium sulfate	29.5	357.0
17	“	Ammonium sulfate and Basic slag	24.2	362.9
19	“	Ammonium phosphate, Muriate of potash, Potassium iodide and Basic slag	23.0	431.8
14	“	Ammonium phosphate	31.1	523.9
15	“	Superphosphate, Ammonium sulfate and Basic slag	31.0	588.0
PONDS STOCKED WITH 200 BLUEGILL FRY^e				
10	200	None	4.4	105.7
2	“	Superphosphate, Nitrate of soda, Muriate of potash and Calcium carbonate	8.0	225.9
20	“	Ammonium phosphate, Muriate of potash, Potassium iodide and Basic slag	14.5	229.7
16	“	Superphosphate, Ammonium sulfate and Basic slag	18.8	358.3
9	“	Ammonium phosphate, Muriate of potash and Basic slag	16.6	326.7

^aFertilizers applied May 22, June 19, July 29 and September 3, 1936.

^bOrganic matter in parts per million.

^cPonds drained November 16 and 17, 1936. Fish production expressed in pounds per acre (Extrapolated).

^dTotal of 100 bluegill fingerlings with an average weight of 5.7 grams each, stocked in each pond May 22, 1936.

^eTotal of 200 recently hatched bluegill fry with an average weight of 0.034 gram each stocked in each pond May 22, 1936.

Table 18. Fish stocked and removed in/from Farm Pond 1 in 1936.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegills (Adults)	10		7	N/A
Bluegills (Sub-adults)			259 ^d	16.19
Bluegill (Fingerlings)			21,561 ^d	53.88
Largemouth bass (Adults)	4		3	8.19
White crappie (Adults)	8		12 ^e	8.00
White crappie (Fingerlings)			3,768 ^d	28.75
Yellow bullheads (Adults)	10		54 ^c	31.50
Yellow bullhead (Fingerlings)			2,006 ^e	68.06
Channel catfish (Adults)	2		2	5.25
Chub suckers (Adults)	200		2,733 ^f	74.12 ^g
Total weight of fish recovered				295.94

^aFish present in pond in spring of 1936.

^bFish recovered in December, 1936.

^cWeights in pounds.

^d1936 year-class.

^eIncludes recruits from 1936 year-class.

^fIncludes numbers of fish stocked plus the number of the 1936 year-class.

^gIncludes the weights of fish stocked plus the weight of the 1936 year-class.

Table 19. Data obtained from the stocking of 50 fingerling bluegills in Pond D-17 in 1937. Experiment conducted from May 31, 1937 to November 6, 1937. Pond fertilized with ammonium sulfate, superphosphate, muriate of potash and basic slag.

Fish Stocked ^a			Fish Recovered ^b		
Bluegills	Number	Weight	Bluegills	Number	Weight ^c
Fry	50	N/A	Fingerlings	29	1.50

^aPond stocked May 31, 1937.

^bPond drained November 6, 1937.

^cTotal weight in pounds.

Table 20. Summary of data obtained from stocking several 'D' Ponds with different numbers of bluegill fingerlings in 1937. Fish were stocked February 25, 1937 and removed from the ponds on November 6 of the same year. The ponds were fertilized with ammonium sulfate, superphosphate, muriate of potash and basic slag. Two ponds received no fertilizer.

Pond No	Number Stocked^a	Average Weight Stocked^b	Number Recovered^{c,d}	Average Weight Recovered^b	Growth Rate^e
2	50	0.066	41	0.063	- 4.6
5 ^f	50	0.040	32	0.034	- 15.0
3	25	0.052	25	0.080	+ 53.8
6	10	0.062	10	0.160	+ 158.1
11 ^f	10	0.094	10	0.080	- 14.9
12	10	0.088	10	0.141	+ 60.2

^aPonds stocked February 25, 1937.

^bWeight in pounds

^cPonds drained November 6, 1937

^dNumber of original stock recovered.

^eGain or loss in average weight, divided by average weight at stocking, expressed as a percentage.

^fPonds received no fertilizer.

Table 21. Data obtained from stocking 50 fingerling bluegills and 2 fingerling white crappie in Pond D-7 in 1937. Experiment continued from February 25 until November 6. Pond fertilized with ammonium sulfate, superphosphate, muriate of potash and basic slag.

Fish Stocked ^a			Fish Recovered ^b		
Bluegill	Number	Weight ^c	Bluegill	Number	Weight ^c
Fingerlings	50	2.12 ^d	Fingerlings	43	2.00 ^f
Crappie			Fry	7	0.12
Fry	2	0.009 ^e	Crappie		
			Fingerlings	2	0.06 ^g

^aPond stocked February 25, 1937 with 3 year-old fingerlings.

^bPond drained November 6, 1937.

^cTotal weight in pounds.

^dAverage weight at stocking was 19.1 grams each.

^eAverage weight at stocking was 2.0 grams each.

^fAverage weight at draining was 21.1 grams each.

^gAverage weight at draining was 13.6 grams each.

Table 22. Data obtained from stocking Farm Pond 1 in 1936 and 1937 and its draining in 1937.

Species	Fish stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight
Bluegills (Adults)	10		N/A	3.37
Bluegills (Fingerlings)				10.50
Bluegills(Fry)				68.62
Largemouth bass (Adults)	10			12.38
White crappie (Adults)	10	5.75		10.62
White crappie (Fingerlings)				0.38
White crappie (Fry)				31.88
Channel catfish (Adults)	2	5.25		13.06
Yellow bullheads (Adults)	10	7.19		8.81
Yellow bullheads (Fingerlings)				62.25
Chub suckers (Adults)				15.56
Goldfish (Adults)				2.44
Goldfish (Fingerlings)	100			
<i>Gambusia</i>				2.00
Total weight of all fish recovered				241.87

^aSome of these fish were re-stocked when the pond was drained in the fall of 1936. Others were stocked in early 1937.

^bAll fish were recovered on November 15, 1937.

^cWeight in pounds. No weights were given for the fish stocked in early 1937.

Table 23. Data obtained from an experiment conducted in the in the 'A' Pools in 1938 to determine the effect of different fertilizer mixtures on fish production.

Pool Number	Species	Treatment (N-P-K)	Stocked		Recovered	
			Number	Weight ^a	Number	Weight ^a
1	<i>Gambusia</i>	1-0.5-0.25	50	85.0	36	113.4
2	Bluegills	6-8-4 ^b	75	6.8	54	313.0
3	"	6-8-4 ^c	75	'	47	281.2
4	Shrimp	1-0.5-0.25	100	28.4	None	0.0
5	Bluegills	None	75	6.8	67	131.5
6	"	0-2-2	"	"	49	226.8
7	"	2-2-2	"	"	79 ^h	399.2
8	"	4-2-2	"	"	71	368.6
9	"	6-2-2	"	"	29	281.2
10	"	8-2-2	"	"	40	399.2
11	"	10-2-2	"	"	21	399.2
12	"	8-0-2	"	"	0	0.0
13	"	8-1-2	"	"	11	313.0
14	"	8-2-2	"	"	18	399.1
15	"	8-4-2	"	"	38	399.1
16	"	1-0.5-0.25	"	"	66	313.0
17	"	None	"	"	69	108.9
18	"	4-2-0	"	"	65	281.2
19	"	4-2-1	"	"	69	399.2
20	"	4-2-2	"	"	100 ^h	399.2
21	"	4-2-4	"	"	78 ^h	340.2
22	"	CSM ^d	"	"	35	226.8
23	"	CSM ^e	"	"	40	281.2
24	"	CSM ^f	"	"	31	426.4
25	"	Soil Box	"	"	54	113.4
26	"	<i>Chara</i> ^g	100	6.6/28.4	47	226.8
27	"	<i>Najas</i>	100	"	29/352 ⁱ	86.2/54.4 ⁱ
28	Bluegills	<i>Chara</i>	75	6.8	40	172.4
29	"	Manure	"	"	75	539.8
30	"	<i>Najas</i>	"	"	50	113.4

^aWeight in grams.

^bCotton fertilizer alone.

^cCotton fertilizer plus Nitrate of soda.

^dCottonseed meal.

^eCottonseed meal plus Superphosphate.

^fCottonseed meal plus 1-0.5-0.25.

^g75 bluegills plus 100 shrimp.

^hExtra fish added

ⁱBluegills and Freshwater Shrimp.

Table 24. Results obtained from stocking bluegills, white crappie and goldfish in four 'C' Ponds in 1938. All ponds fertilized with 6-8-4 and 10 pounds of NaNO₃.

Pond Number	Fish Stocked			Fish Recovered		
		Number	Weight ^b	Number	Weight ^b	
C- 1 ^a	Bluegills (Sub-adults)			284	13.69	
	Bluegill (Fry)	236	0.08	296 ^c	0.44	
	Crappie (Sub-adults)			23	2.06	
	Crappie (Fingerlings)	24	0.11			
	<i>Gambusia</i>	100	N/A	1,569	4.81	
	Total weight of all fish recovered					21.00
C-2 ^d	Bluegills (Fry) ^e			183 ^c	2.31	
	Crappie (Fingerlings)	5	0.06	110	6.31	
	Goldfish (Adults)	N/A	N/A	44	20.06	
	Total weight of all fish recovered					28.69
	C-3 ^f	Bluegills (Adults)	22	3.12	20	5.06
Bluegills (Fingerlings)				4,490 ^c	36.75	
Crappie (Fingerlings)		N/A	N/A	72	3.12	
Total weight of all fish recovered					44.93	
C-4 ^f	Bluegills (Adults)	22	3.12	20	5.00	
	Bluegills (Fingerlings)			3,104 ^c	32.38	
	Crappie	N/A	N/A			
	Crappie (Fingerlings)			91	4.62	
Total weight of all fish recovered					42.00	

^aPond stocked June 20, 1938, and drained November 18, 1938.

^bWeight in pounds.

^c1938 year-class

^dPond stocked May 2, 1938, and drained September 27, 1938.

^eFish introduced from waterline.

^fPond stocked April 13, 1938 and drained August 23, 1938.

Table 25. Results obtained from the stocking Farm Pond 1 in 1937 and 1938 and its draining in 1938.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegill				
Bluegills (Adults)	8	3.38	11	3.75
Bluegills (Fingerlings)		82.50	5,661	125.94
Bluegills (Fry)			21,670 ^d	58.10
White crappie (Adults)	4	5.75	5	4.06
White crappie (Fingerlings)	3,849	32.25	1,392	42.75
Largemouth bass (Large adults)	10	25.31	10	39.94
Largemouth bass (Small adults)			3	3.75
Channel catfish (Adults)	4	13.06	4	14.62
Yellow bullheads (Adults)	10	8.81		
Yellow bullheads (Fingerlings)	668	62.25	493 ^e	82.00
Chub suckers (Sub-adults)	277	15.56	50	4.31
Goldfish (Adults)	3	2.44	2	2.75
Goldfish (Fingerlings)	89	4.25		
<i>Ganbusia</i>	630	2.00	3,017	2.75
Total weight of all fish stocked and recovered		257.56		385.0

^aMost fish stocked November 15, 1937. Some bass stocked in spring of 1938.

^bFish recovered December 8, 1938.

^cWeight in pounds.

^dWeight of fry and fingerlings combined.

^eIncluded some adults.

Table 26. Data obtained from stocking bluegill fingerlings alone in Farm Pond 2 in 1938. Pond fertilized with ammonium sulfate, superphosphate, muriate of potash and basic slag.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegills (Adults)			263	31.56
Bluegills (Fingerlings)	750	9.69	17,197	46.56
Yellow bullheads (Fingerlings)			1,244 ^d	62.00
Chub suckers (Fingerlings)			1,896 ^d	49.25
Silversides			1 ^d	0.12
<i>Gambusia</i>			1,087 ^d	4.68
Total weight of all fish recovered				194.17

^aFish stocked March 24, 1938.

^bFish recovered November 30, 1938.

^cTotal weight in pounds.

^dFish entered pond from stream.

Table 27. Data obtained from stocking bluegill and white crappie fingerlings in Farm Pond 3 in 1938. Pond fertilized with ammonium sulfate, super phosphate and muriate of potash.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegills (Adults)			287	44.50
Bluegills (Fingerlings)	1,800	18.44	29,778	124.50
White Crappie (Adults)			53	24.94
White crappie (Fingerlings)	240	2.50	240	19.00
<i>Gambusia</i>			5,023	16.81
Weight of all fish recovered				229.75

^aPond stocked March 24, 1938.

^bPond drained November 28, 1938.

^cWeight in pounds.

Table 28. Results obtained from the stocking of adult bluegills, white crappie and flathead catfish adults in Farm Pond 4 in 1938. Pond fertilized with ammonium sulfate, superphosphate and muriate of potash.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegills (Adults)	10	4.38	3	2.62
Bluegills (Fingerlings)			1,698	68.62
Bluegills (Fry)			4,585	30.31
White crappie(Adults)			12	3.56
White crappie (Fingerlings)	134	0.88	2,125	161.62
Flathead catfish (Adults)	10 ^d	28.12	10	44.94
Flathead catfish (Fingerlings)			1	Trace
<i>Gambusia</i>			4,721	10.94
Total weight of all fish recovered				322.61

^aPond stocked March 24, 1938.

^bPond drained December 3, 1938.

^cWeight in pounds.

^dOne fish stocked March 31,1938 and nine stocked April 13, 1938.

Table 29. Sand Mountain ('Upper' Pond) fishing records for 1937 and 1938.

Year	Fish Caught^a					
	Bluegills			Largemouth Bass		
	Number	Weight^b	Average Weight^b	Number	Weight^b	Average Weight^b
1937	72	20.0	0.28	12	22.50	1.88
1938	310	80.0	0.26	52	84.75	1.63

^aNo bullhead catch recorded.

^bWeight in pounds.

Table 30. Results obtained from stocking various combinations of bluegills, largemouth bass, white crappie and golden shiners in the 'C' Ponds in 1939.

Pond	Fish	Stocked ^a		Recovered ^b	
		Number	Weight ^c	Number	Weight ^c
C-1	Bluegills (Adult)	284	13.62	252	19.56
	Bluegills (Small)	296	0.44	2,977	19.06
	Crappie (Adults)			8 ^d	3.31
	Crappie (Small)	23	2.06	2,121	9.06
	Chub suckers (Small) ^e			2	0.56
	Yellow bullheads (Small) ^e			1	0.25
	<i>Gambusia</i>	1,599	4.80	1,040	1.38
	Total fish recovered (Pounds)				53.18
C-2	Bluegills (Adults)			161	18.88
	Bluegills (Fingerlings)	240	4.12	12,594	18.25
	Bass (Large)			10 ^f	3.38
	Bass (Small)	24	1.06		
	Golden shiners	24	1.88	18	2.12
	Total fish recovered (Pounds)				42.63
C-3	Bluegills (Adults)			192	15.56
	Bluegills (Fingerlings)	240	3.62	15,437	18.74
	Bass (Large)			6	3.19
	Bass (Small)	24	1.00		
	Total fish recovered (Pounds)				37.49
C-4	Golden shiners (Fingerlings)	24	1.80	25	6.49
	Bass (Large)				
	Bass (Small)	24	1.31	44	6.49
	Total fish recovered (Pounds)				8.74

^aC-1 stocked November 18, 1938 when the fish from the 1938 experiment were returned to the pond. C-2, C-3 and C-4 were stocked February 1, 1939.

^bAll "C" Ponds drained November 25-27, 1939.

^cWeight in pounds.

^dTen fish removed for laboratory use.

^e"Wild" fish from the water supply line from Farm Pond - 1.

^fOne bass removed earlier for laboratory use.

Table 31. Results obtained in 1939 when several species of fish recovered from the draining of Farm Pond 1 on December 8, 1938 were returned to the pond.

Species	Fish Recovered, December 7, 1939 ^a	
	Number	Weight (Pounds)
Bluegills (Large)	28	7.75
Bluegills (Medium)	4,093	188.87
Bluegills (Small)	25,620	49.88
Largemouth bass (Large)	9	43.50
Largemouth bass (Small)	1	0.19
White crappie (Large)	8	10.43
White crappie (Small)	1,707	66.31
Yellow bullheads (Large)	212	100.12
Yellow bullheads (Small)	141	8.93
Chub suckers	4	0.12
Red-ears ^b	1	0.37
<i>Gambusia</i>	956	1.80
Total pounds of fish recovered		487.27

^aMany of these fish had been returned to the pond when it was drained on December 8, 1938.

^bRed-ears = Shellcrackers.

Table 32. Weights (Pounds) of different species recovered from Farm Pond 1 in 1937, 1938 and 1939.

Species	Fish Recovered (Pounds)		
	Nov 15, 1937	Dec 8, 1938	Dec 7, 1939
Bluegills	82.50	188.68	246.87
Largemouth Bass	12.37	43.68	43.69
White crappie	42.87	44.81	76.74
Channel catfish ^a	13.06	14.62	
Yellow bullheads	71.06	82.00	109.05
Chub suckers	15.56	4.31	0.12
Goldfish ^a	2.43	2.75	
<i>Gambusia</i>	2.00	2.75	1.80
Fish recovered	241.89	385.60	487.27
“F/C” Ratio ^b	2.54	2.74	3.05

^aChannel catfish and goldfish removed from pond on draining in 1938 were not restocked.

^bRatio of the weights of ‘forage’ fish and ‘carnivorous’ fish recovered.

Table 33. Data obtained from stocking adult bluegills, shad, *Gambusia*, and flathead catfish in Farm Pond 2 in 1939.

Species	Stocking ^a		Draining ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegills (Large)	750	2.43	474	29.50
Bluegills (Small)	1,113	7.79	23,734	58.00
Shad	8	0.75	3	4.25
Flathead catfish	10	44.93	8	38.75
Bullheads (Large) ^d	-	-	2	1.00
Bullheads (Small) ^d	-	-	95	4.25
Chub suckers ^d	-	-	19	2.75
<i>Gambusia</i> ^d	-	-	3,026	4.43
Total ^c				142.93

^aStocked – January 1, 1939.

^bDrained – December 2, 1939.

^cWeight in pounds.

^dGained entrance from stream.

Table 34. Data obtained from the stocking of bluegills and white crappie in Farm Pond 3 in 1939.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegills (Large)	144	22.25	2,462	114.62
Bluegills (Small)	29,778	124.50	15,554	229.56
White crappie ^d			17 ^g	22.37
White crappie ^e	26	12.50	118 ^h	13.37
White crappie ^f	240	19.00	2,368	52.62
<i>Gambusia</i>	5,023	16.81	10,397	14.68
Total weight ^c		195.06		447.22

^aFish re-stocked after draining on November 28, 1938.

^bFish recovered December 8, 1939.

^cWeight in pounds.

^d1936 year-class.

^e1937 year-class.

^f1938 year-class.

^gFive of these crappie removed in 1939 for laboratory use.

^hThirty-two of these crappie removed in 1939 for laboratory use.

Table 35. Results obtained from stocking fingerling largemouth bass and fingerling bluegills in Farm Pond 4 in 1939. Pond was fertilized with 6-8-4 plus 10 pounds of nitrate of soda to keep water 'green.'

Species	Stocked ^a		Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegills (Adults)	2	1.93	1,663 ^e	432.40
Bluegills (Fingerlings)	1,950	63.52	8,216	49.00
Largemouth bass (Adults)			90 ^f	71.80
Largemouth bass (Fingerlings)	127	5.31	193	28.80
White crappie (Adults)			4	4.50
White crappie (Fingerlings) ^d	4		241	36.30
Gambusia (Adults)	4,721	10.93	207	0.40
Weight of all fish recovered				632.20

^aFish stocked February 1, 1939.

^bFish recovered December 11, 1939.

^cWeight in pounds

^dAccidental introduction.

^eTotal of 51 adults removed for laboratory use.

^fTotal of 5 adults removed for laboratory use.

Table 36. Bottom organisms, plankton production and fish production in Farm Pond 1 and Farm Pond 3 in 1940. Samples taken over a 5-month period.

Comparison	Farm Pond 1^a	Farm Pond 3^b
Plankton production expressed as average milligrams of dried organic matter per liter of water in all samples.	2.54	5.81
Quantity of bottom organism expressed as average milligrams of organic matter per square foot for all samples.	19.62	68.27
Fish production expressed in pounds per acre.	147.1	382.9

^aPond received no fertilizer.

^bPond fertilized.

Table 37. Results obtained from stocking largemouth bass and bluegills in Farm Pond 1 in 1940.

Species	Fish Stocked ^{a,b}		Fish Recovered ^c	
	Number	Weight ^d	Number	Weight ^d
Bluegills (Adults)			601	68.2
Bluegills (Fingerlings)	720	3.9		
Bluegills (Fry and fingerlings)			356,809	70.1
Largemouth bass (Adults)			41	38.1
Largemouth bass (Fingerlings)			2	0.1
Largemouth bass (Fry)	51	0.002		
Yellow bullheads (Fingerlings) ^e			451	25.9
Chub suckers (Sub-adults) ^e			579	62.5
Total pounds of fish recovered				264.9

^aBluegills stocked January 13 and February 6, 1940.

^bLargemouth bass fry stocked May 9, 1940.

^cFish recovered November 11, 1940.

^dWeight in pounds.

^e“Wild” fish from the stream.

Table 38. Results obtained from stocking bluegills, largemouth bass, flathead catfish and shad in Farm Pond 2 in 1940. Pond fertilized with a mixture of cottonseed meal and superphosphate in a 3:1 ratio.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegills (Adults)			787	72.4
Bluegills (Fingerlings)	15,500	229.0	1,550	55.6
Largemouth bass (Adults)			38	33.8
Largemouth bass (Sub-adults)	46 ^d	11.1		
Largemouth bass (Fingerlings)			12	.09
Flathead catfish (Adults)	8	38.8	8	46.2
Shad (Adults)			56 ^f	29.1
Shad (Sub-adults)	8	0.8		
White crappie (Sub-adults) ^e			80	19.1
Yellow bullheads (Sub-adults) ^e			3	0.8
Total weight of all fish recovered				257.9

^aMost fish stocked in December, 193.

^bAll fish recovered November 11, 1940.

^cWeight in pounds.

^dA total of 26 largemouth bass was stocked on March 14, 1940 and 20 on May 22.

The total weight stocked was 11.1 pounds.

^e“Wild” fish.

^fIncludes some fish from the 1940 year-class.

Table 39. Results obtained from stocking bluegill fingerlings and largemouth bass fry in Farm Pond 3 in 1940. Pond fertilized with cottonseed meal and superphosphate in a 3:1 ratio.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegills (Adults)			1,724	188.2
Bluegills (Fingerlings)	2,250	4.2	590 ^d	8.2
Bluegills (Fingerlings)			46,040 ^e	204.5
Largemouth bass (Adults)			135	58.6
Largemouth bass (Fry)	150	0.006		
Total pounds of fish recovered				459.5

^aBluegills stocked February 6, 1940 and bass May 9, 1940.

^bFish recovered November, 1940.

^cWeight in pounds.

^dEarly hatch.

^eLate hatch.

Table 40. Results obtained in the continuation of the “Eureka” Experiment in Farm Pond 4 in 1940. Pond fertilized with commercial fertilizer (6-8-4 plus 10 pounds of nitrate of soda) to keep good ‘green’ color in pond.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegills (Adults)	1,663	432.4	1,066	265.0
Bluegills (Fingerlings)	8,216	49.0	7,494	39.0
Largemouth bass (Adults)	90	71.8	93	35.3
Largemouth bass (Fingerlings)	193	28.8	26	2.1
White crappie (Adults)	4	4.5	83	28.1
White crappie (Fingerlings)	241	36.3	1	0.1
<i>Gambusia</i>	207	0.4		
Totals		632.2		369.6

^aRemember that all fish recovered when Farm Pond 4 was drained on December 11, 1939, was returned to the pond. This constituted the stocking for 1940.

^bFish recovered on draining November 27, 1940. Remember that a large number and weight of fish had been removed by fishing during the year.

^cWeight in pounds.

Table 41. Results obtained from the 'controlled' fishing of Farm Pond 4 in 1940.

Species	Recovered by Draining ^a		Recovered by Fishing ^b		Recovered by Fishing and Draining	
	Number	Weight ^c	Number	Weight ^c	Number	Weight ^c
Bluegill (Adults)	1,066	265.0	804	228.2	1,892 ^c	501.6 ^d
Bluegills (Fingerlings)	7,494	39.0	---	---	7,494	39.0
Largemouth bass (Adults)	93	35.3	120	68.5	213	102.8
Largemouth bass (Fingerlings)	26	2.1	---	---	26	2.1
White crappie (Adults)	83	28.1	125	43.8	208	71.9
White crappie (Fingerlings)	1	0.1			1	0.1
Total weight of all fish		369.6 ^e		339.5		717.5

^aPond drained November 27, 1940.

^bFishing began February 1, 1940 and ended November 9, 1940.

^cWeight in pounds.

^dIncluded 22 bluegills (8.6 pounds) removed by seining for laboratory use.

^e'F/C' ratio of population at time of draining was 3.1.

Table 42. Experimental design used in the evaluation of the use of different species of forage fish in the stocking of ‘terrace-water’ fishing ponds. Average weights of individual fish stocked: bass fry, 0.17 g; bass fingerlings, 13.0 g; bluegill fingerlings, 0.94 g.

Pond Number	Species and Number of Fish Stocked
1	Goldfish(50) ^{a,b} and bass fry (50) ^c
2	Goldfish (50) and bass fingerlings (50) ^d
3	Golden shiners (50) and bass fry (50) ^b
4	Golden shiners (50) and bass fingerlings (50) ^d
5	Bluegill fingerlings (400) and golden shiner fingerlings (100)
6	Bluegill fingerlings (50), golden shiner fingerlings (50) and bass fry (50) ^c
7	Bluegill fingerlings (50), goldfish (50) and bass fry (50) ^c
8	Bluegill fingerlings (50), goldfish (50) and bass fingerlings (50) ^d
9	Bluegill fingerlings (50) and bass fry (50) ^c
10	Bluegill fingerlings (50) and bass fingerlings (50) ^d
11	Bluegill fingerlings (375), <i>Gambusia</i> (88) and bass fingerlings (25) ^e
12	Red-ears (3), <i>Gambusia</i> (70) and bass fingerling (25) ^e
13	Shad (17) and bass fry (50) ^c
14	Shad fry (Several hundred) ^f

^aAll goldfish, golden shiners, bluegills and red-ears stocked between November 18, 1940 and November 22, 1940.

^bNumber in parentheses indicates number stocked per pond.

^cBass fry stocked May 8, 1941.

^dBass fingerlings stocked October 1, 1941.

^eBass fingerlings stocked December 8, 1940

^fShad fry stocked May 15, 1941.

Table 43. Results obtained from the stocking of golden shiners in Pond C-1 in 1940.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Golden shiners (Small)	182	0.58	575	8.2
Bluegills (Large) ^d			6	1.1
Bluegills (Small)			10,292	27.7
Total weight of fish recovered				37.0

^aGolden shiners stocked March 5, 1940.

^bFish recovered November 11, 1940.

^cWeight in pounds.

^dNo record of bluegill stocking – probably ‘wild’ fish.

Table 44. Data obtained from the re-stocking, fishing and draining of Farm Pond 2 during the period 1940 and 1941.

Species	Fish Stocked ^a		Fish Caught ^b		Fish Recovered ^c	
	Number	Weight ^d	Number	Weight ^d	Number	Weight ^d
Bluegills (Adults)	787	72.4	138	26.6	697	154.0
Bluegills (Fingerlings)	1,550	55.6			1,275	40.0
Largemouth bass (Adults)	38	33.8	18	18.2	15	23.0
Largemouth bass (Fingerlings)	12	0.9			161	9.0
White crappie (Adults) ^e	80	19.1	9	4.3	59	30.0
White crappie (Small)					5	1.5
Yellow bullheads (Small) ^e	3	0.8	1	0.5	5	0.2
Total weight of all fish		182.6		49.6		257.7

^aFished recovered in 1940, returned to pond November 19, 1940.

^bTotal weight of fish removed by fishing in 1941.

^cPond drained in the late fall of 1941. Annual Report did not record the actual date.

^dWeight in pounds.

^eThese fish were not observed in the pond when it was drained in 1940.

Apparently they either were accidently left in the pond, or gained entrance from the stream.

Table 45. Average weights (Pound) of bluegills, largemouth bass and white crappie taken by fishing in Farm Pond 2, 3 and 4 in 1941.

Pond	Average Weight (Pound) of Fish Caught:		
	Bluegills	Largemouth Bass	White crappie
Farm Pond - 2	0.19	1.10	0.48
Farm Pond - 3	0.17	0.75	---
Farm Pond - 4	0.34	0.38	0.46

Table 46. Data obtained from the restocking, fishing and draining of Farm Pond 3 in 1940 and 1941.

Species	Fish Stocked ^a		Fish Caught ^b		Fish Recovered ^c	
	Number	Weight ^d	Number	Weight ^d	Number	Weight ^d
Bluegills (Adults)	1724	188.2	681	117.2	801	89.3
Bluegills (Fingerlings)	46,630	212.7			14,155	211.5
Largemouth bass (Adults)	135	58.6	76	57.1	27	31.0
Largemouth bass (Fingerlings)	0	0.0			263	13.3
Weight of all fish		459.6		174.3		345.1

^aThe pond was stocked in November, 1940 when it was drained, the fish counted, weighed and returned to the pond.

^bFish recovered by fishing in 1941.

^cPond was drained November 13, 1941.

^dWeight in pounds.

Table 47. Data obtained from the re-stocking, fishing and draining of Farm Pond 4 in 1940 and 1941.

Fish Stocked ^a			Fish Caught ^b		Fish Recovered ^c	
	Number	Weight (Pounds)	Number	Weight (Pounds)	Number	Weight (Pounds)
Bluegills						
Adults	1066	265.0	532	179.1	716	191.5
Fingerlings	7494	39.0			59,887	142.2
Largemouth bass						
Adults	93	35.3	45	17.0	57	36.8
Fingerlings	26	2.1			83	10.5
Crappie						
Adults	83	28.1	31	14.2	40	24.0
Fingerlings	1	0.1			0	0.0
All fish		369.6		210.3		405.0

^aStocked November 27, 1940 with fish recovered from 1940 fishing experiment.

^bFish removed by fishing in 1941.

^cDrained November 17, 1941.

Table 48. Weights (Pounds) of largemouth bass and white crappie recovered on draining Farm Pond 4 in 1939, 1940 and 1941.

	Weights of Bass and Crappie Recovered on Draining			
Year	Adults		Fingerlings	
	Bass	Crappie	Bass	Crappie
1939	71.8	4.5	28.8	36.3
1940	35.3	28.1	2.1	0.1
1941	36.8	24.0	10.5	0.0

Table 49. Some data obtained on the termination of the forage evaluation experiment conducted in the 'F' Ponds in 1940 and 1941. The experiment was terminated on November 27, 1941, with the draining of nine of the ponds.

Pond	Forage	Bass Survival	Weight of Bass^a
1	Goldfish	38 of 50 fry	0.34
3	Golden shiners	32 of 50 fingerlings	0.58
6	Bluegills and golden shiners	38 of 50 fry	0.62
7	Bluegills and goldfish	16 of 50 fry	0.38
9	Bluegills	35 of 50 fry	0.44
11	Bluegills	18 of 25 fingerlings	0.46
12	Red-ears and <i>Gambusia</i>	14 of 25 fingerlings	0.68
13	Shad	41 of 50 fry	0.64

^aWeight in a fraction of a pound.

Table 50. Stocking and draining data for Pond F-11 in 1940 and 1941.

Species	Fish Stocked ^a		Fish Recovered ^b	
	Number	Weight ^c	Number	Weight ^c
Bluegill (Adults)			121	19.50 ^d
Bluegill (Fingerlings)	375	0.78	2,783	13.25
Largemouth bass (Adults)			18	8.25 ^e
Largemouth bass (Fingerlings)	25	0.72		
<i>Gambusia</i>	70			
Total weight of fish recovered				41.00 ^c
'F/C' Ratio				3.97

^aBass stocked December 8, 1940; bluegills stocked December 18, 1940.

^bFish recovered November 27 and 29, 1941.

^cWeight in pounds.

^dAverage weight of bluegill recovered – 0.16 pound.

^eAverage weight to bass recovered – 0.46 pound.

Table 51. Experimental design used to determine the value of stocking golden shiners, shad, goldfish or *Gambusia* with largemouth bass and bluegills in 11 'F' Ponds in 1941 and 1942.

Pond Number	Species and Number Stocked					
	Bass	Bluegill	Golden Shiners	Shad	Goldfish	Gambusia
18	100	1000	100			
19	100	1200	100			
20	100	1500	100			
21	200	1000	100			
22	100	1000		48		
23	100	1500		48		
24	200	1000		48	48	
25	100	1000			48	
26	100	1500			48	
27	200	1000			48	
5	100	1500				50

Table 52. Summary of pond stocking recommendations as given by Swingle and Smith (1942) in AES *Bulletin 254*.

Combination 'A' : Bluegills and Largemouth Bass	
Fertilized Pond	1500 bluegill fingerlings added in the late summer, fall or winter; 100 bass fingerlings added in the fall or winter, or 100 fry added the following spring.
Unfertilized Pond	400 bluegill fingerlings added as recommended above; 30 bass fingerlings added as recommended above
Combination 'B': Bluegills, White Crappie and Largemouth Bass	
Fertilized Pond	1500 bluegill fingerlings added as recommended above; 75 bass fingerlings added as recommended above; 25 crappie fingerlings or fry added along with the bass.
Unfertilized Pond	400 bluegill fingerlings added as recommended above; 20 bass fingerlings added as recommended above; 10 crappie added as recommended above.
Combination 'C' : Bluegills, Bullhead Catfish and Largemouth Bass	
Fertilized Pond	1200 bluegill fingerlings added as recommended above; 75 catfish fingerlings added in the fall or an equal number of fry the following spring; 100 bass fingerlings added as recommended above.
Unfertilized Pond	300 bluegill fingerlings added as recommended above; 25 catfish fingerlings added as recommended above; 30 bass fingerlings added as recommended above.

Table 53. Production, per acre, of shellcrackers and largemouth bass in an experiment in Pond F-11 in 1942 and 1943.

Species	Stocking/Acre		Draining	
	Number	Weight		
Bass				
Fry	150	0.108		
Adults			108	46.0
Shellcrackers				
Fingerlings	1500	1.7		
'Y-O-Y'			16,400	41.0
Adults			1,708	209.0

- Shellcrackers stocked August, 1942.
- Bass stocked May, 1943.
- All weights in pounds.
- 'Y-O-Y' – Young of the year.

Table 54. Experimental design used in the research in the 'E' Ponds, in 1942, 1943 and 1944, to evaluate different stocking combinations of bluegill, largemouth bass, shellcrackers, white crappie and *Gambusia* through the use of public 'fee' fishing.

Pond Number	Species and Number Stocked ^a				
	Bluegills ^b	Shellcrackers ^b	Largemouth bass ^c	White crappie ^b	<i>Gambusia</i>
E-1	750	750	150	---	200
E-2	---	1500	150	---	200
E-3	1500	---	150	---	200
E-4	1500	---	150	25	200
E-5	1500	---	150	---	200
E-6	1500	---	150	---	200
E-7	1500	---	150	---	200
E-8	1500	---	150	---	200

^aBluegills, shellcrackers and *Gambusia* fingerlings stocked in October, 1942. White crappie fingerlings stocked February, 1943. Largemouth bass fry stocked May, 1943.

^bStocked as fingerlings.

^cStocked as fry.

Table 55. Number and weight (Pounds) of all species caught in four 'E' Ponds in 13 'half-days' of fishing in 1944.

Pond	Number and Weight of Bass, Bluegills and Shellcrackers Caught						Total Weight ^a
	Bass		Bluegills		Shellcrackers		
	Number	Weight	Number	Weight	Number	Weight	
1	56	17.8	792	144.4	268	60.6	223.3 ^c
2	50	15.6	168 ^b	40.1	683	169.8	236.2 ^d
3	56	23.2	1206	220.3	---	---	264.0 ^e
4	62	30.6	1203	176.2	---	---	261.2 ^f

^aAll totals include some 'wild' fish.

^bThese bluegills were not stocked, but gained entry to the pond before fishing began.

^cTotal weight includes 3 green sunfish, weighing 0.3 pound.

^dTotal weight includes 5 green sunfish, weighing 0.8 pound.

^eTotal weight includes 4 golden shiners, weighing 0.4 pound.

^fTotal weight includes 10 green sunfish, weighing 1.8 pounds; 5 catfish, weighing 4.9 pounds and 51 crappie, weighing 17.5 pounds.

Table 56. Average weight (Pound) of bluegills, shellcrackers, white crappie and largemouth bass caught in four 'E' Ponds during the 1944 fishing season. Stocking data for these ponds were shown in Table 54.

Pond	Species			
	Bluegills	Redears	White Crappie	Largemouth Bass
'E'-1	0.18	0.23	---	0.32
'E'-2	0.23 ^a	0.25	---	0.51
'E'-3	0.18	---	---	0.41
'E'4	0.15	---	0.34	0.98

^aThese fish were not stocked. They appeared in the pond as 'wild fish.'

Table 57. Average weight (pound) and average number caught in the four 'E' Ponds and Pond S-6 in the first nine 'half-days' of fishing in 1944 and 1948.

Fishing Day	Average Number of Fish Caught (Per person)		Average Weight (Pounds) of Fish Caught (Per person)	
	'E' Ponds	S-6	'E' Ponds	S-6
1	12.4	9.6	2.95	1.82
2	13.6	7.6	3.07	1.28
3	9.2	8.6	1.92	1.49
4	4.7	7.4	0.92	1.49
5	5.6	9.9	1.13	1.72
6	4.2	9.4	0.81	1.50
7	4.5	7.0	1.00	1.18
8	4.8	7.5	1.02	1.23
9	3.0	8.4	0.70	1.33

Table 58. Summary of some data obtained in 1945, the second year of the 1944-1945 'fishing quality' experiment in four 'E' Ponds (E-1, E-2, E-3 and E-4).

Pond	Total Effort^a	Effort Per Day^b	Total Catch^c	CPUE^d
'E' 1	221	7.9	192.9	0.87
'E' 2	212	7.6	153.9	0.72
'E' 3	243	8.7	204.8	0.84
'E' 4	364	13.0	303.2	0.83
Average	260	9.3	213.7	0.82

^aTotal number of persons fishing 'half-days' during the 28-day, 1945 'fishing season.'

^bAverage number of persons fishing each 'half-day.'

^cTotal catch of all species from each pond.

^dTotal Catch/Total Effort for each pond.

Table 59. Number and weight (Pounds) of large bass, large crappie, large bluegills and large shellcrackers recovered from four 'E' Ponds during draining on December 6, 1945. Pond stocking data were given in Table 54.

Fish recovered	Ponds							
	'E' - 1		'E' - 2		'E' - 3		'E' - 4	
	Number	Weight	Number	Weight	Number	Weight	Number	Weight
Large bass	24	29.5	31	31.0	27	41.0	23	18.5
Large crappie							39	14.5
Large bluegills	145	30.5	30	11.4	593	113.5	1170	186.0
Large shellcrackers	58	21.0	11	8.1				
'Bait-stealers' ^a	49,875		11,899		8,182		15,865	

^aNumber of small and intermediate 'sunfish' (1-inch to 5-inch groups) recovered on draining.

Table 60. Total individual fishing trips and total weight of all species caught in Ponds E-1, E-2, E-3 and E-4 in the 1947 'fishing season.'

Pond	Total Fishing Trips	Total Catch (Pounds)
E-1	299	239.3
E-2	253	197.4
E-3	294	245.3
E-4	225	217.7
Average	268	224.9

Table 61. Data on the stocking of the 'E' Ponds for the 1948-1951 experiment.

Pond	Stocking Rates (Per Acre)	
	Bluegill Fingerlings^a	Bass Fingerlings^b
'E' 1	500	100
'E' 2	1000	100
'E' 3	1500	100
'E' 4	2500	100
'E' 5	2500	100
'E' 6	1500	100
'E' 7	1000	100
'E' 8	500	100

^aStocked November 30, 1948.

^bSpecial 1948 Strain developed by Ellis Prather, stocked April 20, 1949.

Table 62. Data obtained from fishing five 'E' Ponds in 1951.

Pond	Number Persons Fishing	Pounds Caught		Total Pounds Caught	CPUE ^a
		Bass	Bluegills		
E-1	144	2.7	138.7	142.9	0.99
E-2	158	4.4	113.5	120.2	0.76
E-3	301	21.3	236.5	259.6	0.86
E-4	302	17.2	221.8	239.2	0.78
E-8	331	30.2	245.4	277.1	0.84

^aCatch (Pound) per person fishing 'one-half' day.

Table 63. 'F/C' Ratios computed from data obtained from fish recovered on draining the "E" Ponds in the fall of 1951.

Pond Number	'F/C' Ratio^a
E-1	512.3^b
E-2	1727.5^c
E-3	N/A
E-4^d	
E-5^e	
E-6	12.4^f
E-7	9.5 8^g
E-8	8.9^h

- a. 'F/C' Ratio = total weight of forage species (bluegills and shellcrackers)/ total weight of carnivorous species (largemouth bass).
- b. Only one bass, weighting 0.3 pound, recovered on draining
- c. Only seven bass weighting a total of 0.4 pound recovered on draining.
- d. Pond drained earlier.
- e. Pond drained earlier.
- f. No bass reproduction.
- g. No bass reproduction.
- h. Some 48.7 percent of total of all fish recovered were small or intermediate bluegills.

Table 64. Number and weight of largemouth bass, bluegills and shellcrackers removed from 'E' Ponds in 9 days of public fishing during the period August 12 through September 3, 1953. Data on pond stocking is given below.

Pond	Largemouth Bass		Bluegills		Shellcrackers		Total Weight
	Number	Weight	Number	Weight	Number	Weight	
'E'- 1	46	15.4	769	202.5	149	38.8	256.7
'E'- 2	58	29.9	989	303.6	188	49.0	282.5
'E'- 3	52	21.8	580	92.7	233	59.4	173.9
'E'- 6	29	18.6	404	69.9	138	31.1	119.3
'E'- 7	40	27.0	517	81.9	118	75.4	134.3
'E'- 8	68	19.6	428	55.5	199	40.0	145.1

- All ponds stocked with 1000 bluegills and 500 shellcrackers per acre on January 3, 1952.
- All ponds stocked with 125 bass fry on May 1, 1952.

Table 65. Average weight (Pound) of largemouth bass, bluegills and shellcrackers removed from 'E' Ponds in 9 days of public fishing during the period August 12 through September 3, 1953.

Pond	Largemouth Bass	Bluegills	Shellcrackers
'E' - 1	0.33	0.26	0.26
'E' - 2	0.52	0.20	0.26
'E' - 3	0.42	0.16	0.25
'E' - 6	0.64	0.17	0.22
'E' - 7	0.68	0.15	0.22
'E' - 8	0.29	0.20	0.20

Table 66. Number of bluegills, in three different size classes, recovered when six 'E' Ponds were drained in December, 1954.

Pond	Number of Bluegills Recovered			"F/C" Ratios
	Small ^a	Intermediates ^b	Large ^c	
E-1	18,015	1,343	421	4.1
E-2	940	10,504	56	6.6
E-3	30,449	2,140	207	7.6
E-6	276	21,858	5	9.9
E-7	3,296	1,288	116	3.3
E-8	24,657	2,127	44	4.7

^aInch-groups 1 and 2.

^bInch-groups 3, 4 and 5.

^cInch-group 6 and larger.

Table 67. Personnel assigned to the Fisheries Program in 1949 as listed in the 1949 Annual Report.

PERSONNEL

Swingle, H.S.

Lawrence, J.M.

E.E. Prather

TITLE

Fish Culturist

Associate Fish Culturist

Associate Fish Culturist

LABORATORY TECHNICIANS

None

SECRETARIAL SUPPORT

Otto, Sarah

FIELD STAFF

Black A.L.

Foreman

FIELD CREW

Chandler, J.

Dowdell, E.

Greer, W.

Logan, I.

McGee, W.

Nelms, R.

Ogletree, A.

Ogletree, E.T.

Ogletree, G.L.

Ogletree, J.H.

Rowell, R.

Thomas, R.

Walker, P.

Worthy, W.

Appendix Table --B. Project personnel listed in the 1958 Annual Report.

FACULTY

Swingle, H.S.	Fish Culturist
Prather, E.E.	Associate Fish Culturist
Hester, F.E.	Assistant Fish Culturist

LABORATORY TECHNICIANS

None

SECRETARIAL SUPPORT

FIELD STAFF

Black, A.L.	Foreman
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FIELD CREW

Avery, D.B.	McCrary, C.
Avery, W.	Ogletree, B.
Dowdell, E.	Ogletree, E.T
Dowdell, J.	Ogletree, O.L.
Fillmore, H., Jr.	Roberts, H.
Gibson, J.	Washington, M.
Lancaster, J.A.	Watts, T.

Appendix Table --C. Project personnel listed in the 1966 Annual Report.

FACULTY

Swingle, H.S.	Professor
Dendy, J. S.	Professor
Lawrence, J.M.	Professor
Prather, E.E.	Associate Professor
Allison, R	Associate Professor
Shell, E.W.	Associate Professor
Greene, G.N.	Assistant Professor
Krantz, G.E.	Assistant Professor
Fijan, N.	Visiting Assistant Professor
Beasley, P.G.	Instructor
Rogers, W.A.	Instructor
Beckert, H.	Instructor
Swingle, W.E.	Instructor

LABORATORY TECHNICIANS

Norris, F.L.	Laboratory Technician
Phillips, M.G.	Laboratory Technician
Colley, N.	Laboratory Technician
Wahlquist, C.	Laboratory Technician

SECRETARIAL SUPPORT

Lightfoot, L.L.	Clerk
Farrow, B.H.	Typist "A"
Popwell, S.	Typist
Santa-Cruz, N.A.	Typist

FIELD STAFF

Black, A.L.	Farm Ponds Foreman
Ellington, C.S.	Farm Ponds Assistant Foreman

FIELD CREW

Black, H.G.	Lancaster, J.A.
Callaway, E.	Ogletree, B.
Callaway, S.	Ogletree, E.T.
Dowdell, E.	Ogletree, O.L.
Dowdell, J.C.	Ogletree, J.W.

Appendix Table – D. . Project personnel listed in the 1971 Annual Report.

FACULTY

Swingle, H.S	Professor and Department Head
Lawrence, J.M.	Professor
Dendy, J.S.	Professor
Shell, E.W.	Professor
Prather, E.E	Associate Professor
Allison, R.	Associate Professor
Moss, D.D.	Associate Professor
Lovell, R.T.	Associate Professor
Ramsey, J.S.	Unit Leader
Smitherman, R. O.	Associate Professor
Rogers, W.A.	Associate Professor
Boyd, C.E.	Associate Professor
Jeffrey, N.B.	Assistant Professor
Pardue, G.	Assistant Professor
Davies, Wm.	Assistant Professor (Brazil)
Grover, J.H.	Assistant Professor (Philippines)
Schmittou, H.R.	Assistant Professor (Philippines)
Plumb, J.A.	Research Associate
Shelton, Wm.	Assistant Leader

LABORATORY TECHNICIANS

Gordon, D.	Laboratory Technician
Jones, V.	Laboratory Technician
Bunkley, L.	Laboratory Technician
Tillery, L.	Laboratory Technician

SECRETARIAL SUPPORT

Sherrer, C.	Clerk
Schryer, M.	Typist "A"
Miller, E.	Typist "A"
Yates, R.	Typist "A"
Adams, J.	Typist

FIELD STAFF

Black, A.L.	Foreman
Ellington, C.S.	Assistant Foreman

FIELD CREW

Appendix Table __E. Project personnel listed in the 1976 Annual Report.

FACULTY

Shell, E.W.	Professor and Department Head
Dendy, J.S.	Professor
Lawrence, J.M.	Professor
Lovell, R.T.	Associate Professor
Moss, D.D.	Associate Professor
Allison, R.	Associate Professor
Boyd, C.E.	Associate Professor
Crance, J.H.	Associate Professor(Philippines)
Davies, Wm.	Associate Professor (Brazil)
Johnson, M.C.	Associate Professor (Nigeria)
McCoy, E.W.	Associate Professor
Pamatmat, M.M.	Associate Professor
Prather, E.E	Associate Professor
Ramsey, J.S.	Unit Leader
Rogers, W.A.	Associate Professor
Schmittou, H.R.	Assistant Professor (Philippines)
Smitherman, R. O.	Associate Professor
Snow, J.R.	Associate Professor
Wohlfarth, W.G.	Associate Professor
Bayne, D.R.	Assistant Professor
Duncan, B.L.	Assistant Professor (Indonesia)
Grizzle, J.M.	Assistant Professor
Grover, J.H.	Assistant Professor (Philippines)
Leary, D.F.	Assistant Professor (Philippines)
Lovshin, L.L., Jr.	Assistant Professor (Brazil)
Phelps, R.P.	Assistant Professor
Plumb, J.A.	Assistant Professor
Randolph, K.N.	Assistant Professor
Shelton, Wm.	Assistant Leader
Boutwell, J.L.	Research Associate
Butler, J.N., III	Research Associate
Crawford, K.W.	Research Associate
Cremer, M.C.	Research Associate (Indonesia)
Dakin, O.	Research Associate
Forester, T. S.	Research Associate
Goodman, R.K.	Research Associate
Hawke, J.P.	Research Associate
Hopkins, M.L.	Research Associate
Hughes, D.G.	Research Associate (Honduras)
Johnston, E.S.	Research Associate

**Pullen, S.B.
Turner, C.J.**

**Research Associate
Research Associate**

LABORATORY TECHNICIANS

**Gordon, D.
Vanis, L.W.
Pierson, J.M.**

**Laboratory Technician
Laboratory Technician
Technical Assistant "A"**

SECRETARIAL SUPPORT

**Sherrer, C.
Butler, A.P.
Talley, E.G.
Adams, J.
Dowling, K.
Morgan, D.A.
Tilson, T.N.
Tucker, A.C.**

**Clerk
Secretary
Typist "A"
Typist
Typist
Typist
Typist
Typist**

FIELD STAFF

**Black, A.L.
Ellington, C.S.**

**Foreman
Assistant Foreman**

FIELD CREW

Table 68. Number of personnel in six ‘Investigator’ classifications employed in the Fisheries Program in 16 years during the period 1938 to 2015.^a

Year	Tenured and Tenure-Track	Research Fellows ^b	Instructors ^c	Research Associates ^d	Secretarial	Field Crew
1938	2					8
1949	4			0	1	16
1958	5			0	1	13
1966	13		4	0	4	12
1968 ^e	13	0	3	0	8	--
1971	17			1	5	6
1974	23			8	5	7
1976	29			13	8	7
1980	25			9	5	7
1985	20			9	6	7
1990	22	5		9	9	9
1995	21	5		16	10	10
2000	18	6		13	7	7
2005	20	5		13	8	12
2010	21	5		16	8	8
2015	21	4		15	8	8

^aNumber includes individuals who were employed at some time during the calendar year.

^bWith terminal degree, but paid entirely from extramural funds.

^cThis personnel category was used for fisheries employees for only a short time in the fisheries program. It was replaced by the “Research Associate” title.

^dPrior to 1990, some of these personnel had terminal degrees.

^eThis year (1968) was the first full year of the international program (AID/csd-1581).

Table 69. Number of “Faculty” (Tenure and Tenure-Track, Research Fellows, Instructors and Research Associates) employed in the Fisheries Program in 16 different years, during the period 1938-2015. Data summed from Table 65.

Year	‘Faculty’ Employed
1938	2
1949	4
1958	5
1966	17
1968 ^a	16
1971	18
1974	31
1976 ^b	42
1980	34
1985	29
1990	36
1995 ^c	42
2000	37
2005	38
2010	42
2015	40

^aFirst full year of international program.

^bSix “Faculty” on long-term, overseas assignments.

^cNine Extension “Faculty” positions (Hemstreet, Hosking, Howe, Jensen, Perkins, Rikard, Szedlmayer, Wallace and Whitis) now included in FAA Budget.

Table 70. Names of secretaries employed in eight different years in the Fisheries Program. Years chosen represent those when major changes occurred.

Years	Secretaries Employed^a
1948	Sara Otto
1954	Peggy Fuller
1955	Carol Thomley
1958	Betty Porter
1966	Barbara Farrow, Linda Lightfoot, Sandra Popwell, Arlene Santa-Cruz
1976	Anita Adams, Annie Butler, Kathy Dowling, Deborah Morgan, Chris Sherrer, Evelyn Talley, Teresa Tilson, Alma Tucker
1995	Anita Adams, Karen Belcore, Annie Butler, Peggy Crouch, Teresa Howard, Mary Moore, Marianne Jensen, Lula Jones, Tracy Parker, Mary Lou Smith
2011	Karen Booker, Jeannie Harry, Carolyn Jones, Valarie Klein, Loletha Pogue, Susan Smith

^aThe generic title is employed here. Titles and job descriptions have changed numerous times over the years.

Table 71. Secretaries who worked with the Fisheries Program with at least five years of service.

Adams, Anita ('70-'03)
Barnette, Gayle ('86-'10)
Belcalore, Bonnie ('89-'97)
Booker, Karen ('07-)
Burns, June (('86-)
Butler (Graves), Annie ('75-'07)
Carswell, Rita ('13-)
Crouch, Peggy ('82-'95)
Grub, Rita ('08-)
Harry, Jeanie ('07-)
Howard, Teresa ('83-'04)
Jensen (Forrester), Marianne ('85-'98)
Jones, Amy ('78-'84)
Jones, Bri ('13-)
Jones, Carolyn ('07-)
Klein, Valerie ('08-)
Lofaso, Donna ('00-'08)
Markel, Phyliss ('87-'02)
Moore, Mary ('91-'03)
Morgan, Deborah ('76-'82)
Otto, Sara ('47-'51)
Pogue, Loletha ('99-)
Sherrer (Culver), Chris ('68-'78)
Smith, Mary Lou ('79-'08)
Smith, Susan ('08-)
Talley, Evelyn ('72-'78)

Table 72. Persons classified as Research Assistants listed in the FY '15 Budget of the School of Fisheries, Aquaculture and Aquatic Sciences.

Name	Classification
Belkoski, David	Research Assistant I
Dahl, Sunni	Research Assistant I
Devries, Tammy	Research Assistant III
LaFrentz, Stacey Ann	Research Assistant I
Setzer, Braxton	Research Assistant I
Wood, Teresa	Research Assistant III
Stanfill, Adrian	Research Assistant I

Table 73. Persons serving in supervisory roles in Field Operations.

Webb, J. W.	1944-1949
Ridgeway, P.	1947
Black, A. L.	1948-1985
Ellington, C. S.	1963-1995
Goodman, R. K.	1975-2011
Veverica, K. L.	1981-
Beam, D. R.	1985-
Ward, R. M	1988-2002
Arana, E.	2003-
Peterman, M.	2005-2011

Table 74. Names of some 'Field Crew' personnel working for the Fisheries Program during the 1930s, 1950s, 1990s and 2000s.

1930s	1950s	1990s	2000s
Henry, F.	Dowdell, Earnest	Avery, Henry	Avery, Henry
Lamb, "Doc"	Fillmore, Henry	Chamblee, Tommy	Billingsley, Thomas
Ogletree, Eddie T.	Pitts, George	Fralic, Charles	Hopkins, Steve
Ogletree, George	Ogletree, John	Grimmet, Felix	Davis, Jeremy
Ogletree, John	Pitts, James	Jones, Keith	Levett, Willie
Tarver, "Bo"	Ray, Lorenzo	Levett, Willie	Stinson, L.K.
	Washington, Mose	Reese, Kenneth	Williams, Oliver
	Watts, Thomas	Williams, Oliver	

Table 75. Partial list of persons who served as 'Gofers' for the Department of Fisheries and Allied Aquacultures.

**Bailey, Joe
Boyd, Chris
Evans, Dick
Gibson, Bruce
Johnson, Lyle
Latham, Darryl
Latham, Evan**

**O' Brien, Mike
Prather, Marsha
Ramey, Doug
Ramey, John
Shinnick, Ron
Thomas, Ken**

Table 76. Budget information for the Auburn Fisheries Program for FY '51.^a
All amounts given in 'dollars.'

Program	Sources of Funding	Budgeted Activity		
		Salaries	Labor	Maintenance
Research				
	Bankhead-Jones ^b	10,320	8,000	3,980
	State Research ^c	10,020	10,500	3,620
	Fish Production ^d			5,000
	Sales ^e			10,900
Teaching	College Teaching ^f	5,480		
Total		25,820	18,500	23,500

^aAll values in dollars.

^bUSDA Funds.

^cAppropriated by Alabama Legislature.

^dGrant from Alabama Department of Conservation for research on pond management.

^eEstimated value of sales of fishing permits and fish bait.

^fFunds from the University Teaching Division.

Table 77. Number of 'Full-Time-Equivalents' (FTEs) in the Fisheries Program supported by appropriated funds in 25 Fiscal Years, during the period 1945-1946 and 2009-2010.

Years	Source of Funds			
	Teaching	Research	Extension	Total
1945-1946		3.00		3.00
1950-1951	1.13	2.87		4.00
1955-1956	1.05	2.95		4.00
1959-1960	1.06	3.94		5.00
1964-1965	1.00	4.00		5.00
1969-1970	1.22	4.09		5.31
1970-1971	0.91	3.96		4.87
1972-1973	0.98	4.44		5.42
1973-1974	3.82	3.46		7.28
1974-1975	4.58	3.05		8.53
1979-1980	5.24	4.63		9.87
1983-1984	5.67	3.22	1.00	9.89
1984-1985	5.60	3.06	1.00	9.66
1985-1986	6.25	5.98	1.00	13.23
1986-1987	5.62	7.10	1.00	13.72
1987-1988	5.85	6.38	1.00	13.23
1988-1989	5.87	7.77	1.00	14.64
1989-1990	5.67	7.94	2.74	16.35
1990-1991	6.10	9.10	3.22	18.42
1991-1992	6.01	10.64	3.97	20.62
1994-1995	6.69	8.69	3.88	19.26
1999-2000	6.95	8.74	3.25	18.43
2004-2005	6.66	9.17	2.60	18.94
2009-2010	6.01	9.68	2.75	18.44
2014-2015	6.91	10.99	2.50	20.40

Table 78. Names and titles of personnel in Tenure or Tenure-Track positions in the Department of Fisheries and Allied Aquacultures in FY '71.

<u>NAME</u>	<u>TITLE</u>
H. S. Swingle	Department Head, Alumni Research Professor, and Director of the International Center for Aquaculture (ICA).
J. S. Dendy	Professor
J. M. Lawrence	Professor
E. W. Shell	Professor
R. Allison	Associate Professor
C. E. Boyd	Associate Professor
R. T. Lovell	Associate Professor
D. D. Moss	Associate Professor
J. S. Ramsey	Associate Professor ^a
W. A. Rogers	Associate Professor
R. O. Smitherman	Associate Professor
W. D. Davies	Assistant Professor
G. H. Grover	Assistant Professor
N. B. Jeffrey	Assistant Professor
G. B. Pardue	Assistant Professor
H. R. Schmittou	Assistant Professor
W. L. Shelton	Assistant Professor ^a

^aSalaries paid directly by U. S. Fish and Wildlife Service.

Table 79. Funding (University or Extramural) sources for secretarial positions in the Fisheries Program during seven different years in the period FY '50 to FY '10.

Year	FTEs	University Funding	Extramural Funding
FY '50	1.00	1.00	0.00
FY '59	1.00	1.00	0.00
FY '71	3.00	1.51	1.49
FY '80	6.00	4.28	1.72
FY '90	7.00	6.41	0.59
FY '00	4.00	3.95	0.05
FY '10	6.00	6.00	0.00

Table 80. Data on the catch of all species harvested on different 'half-days' from Pond S-6 during the 1948 'fishing season.'

'Half-Day' Periods	Total 'Half-Days' Fished	Total Weight Harvested^a	Average Weight Per Fisherman^a
1-4	951	1,503.1	1.58
20-24	180	180.6	1.01
40-44	119	83.9	0.70
60-64	87	100.8	1.16
80-84	39	40.5	2.03

^aWeight in pound(s)

Table 81. Data on the catch of largemouth bass in different 'half-day' periods from Pond S-6 during the 1948 'fishing season.'

'Half-Day' Period	Total 'Half-Days' Fished	Total Number Harvested	Average Weight Harvested^a
1-4	951	282	0.65
20-24	180	83	0.66
40-44	119	23	0.49
60-64	87	24	0.53
80-84	39	9	0.26

^aAverage weight (Pound) of largemouth bass harvested

Table 82. Total catch (Pounds Per Acre) of all species from Pond S-6 in six months in 1955.

Month	Total Catch (Pounds Per Acre)
March	16.7
April	27.0
May	17.4
June	10.0
July	1.8
August	2.5

Table 83. Number and weight (Pounds) of all fish recovered on draining Pond S-6 on October 18, 1955.

Species	Number	Weight (Pounds)
Largemouth bass	681	607.4
Bluegills	119,168	2,505.6
Shellcrackers	2,490	328.8
Warmouth	5,354	103.7
Green sunfish	900	13.9
Black crappie	877	147.1
Speckled bullheads	217	489.9
Yellow bullheads	7	7.8
Golden shiners	1,029	52.3
Goldfish	4	9.0

Table 84. Number and weight (Pounds) of all fish recovered on draining Pond S-6 on January 23, 1960.

Species	Number	Weight (Pounds)
Largemouth bass	1075	638.3
Bluegills	192,548	4,174.2
Shellcrackers	6,090	611.6
Warmouth	563	64.1
Green sunfish	5,805	49.1
Israeli carp	300	3,244.9
Speckled bullheads	410	584.8
Golden shiners	651	83.5
Goldfish	1	1.4

Table 85. Pounds per acre of largemouth bass, bluegills and shellcrackers removed from Pond S-6 by angling in each of 3 years (1967, 1968 and 1969) of fishing.

Species	Years		
	1967^a	1968^b	1969^c
Largemouth Bass	30.4	31.2	9.4
Bluegills	131.5	88.4	63.9
Shellcrackers	43.1	32.7	14.2
Total	205.0	152.3	87.5

^aMonths fished: May – August.

^bMonths fished: February – September.

^cMonths fished: January – September.

Table 86. Some catch statistics from the channel catfish fishing marketing experiment conducted in Pond S-14 in 1958 and 1959.

Month	Number of Fishermen^a	Total Number Caught^a	Total Weight Caught^b	Number Caught Per Fisherman	Weight Caught Per Fisherman
1958					
September	38	94	73.1	2.5	1.9
October	38	86	68.9	2.3	1.8
November	16	28	25.0	1.8	1.6
December	2	4	4.0	2.0	2.0
1959					
March	12	15	15.1	1.3	1.2
April	46	114	121.1	2.5	2.6
May	240	668	695.6	2.8	2.9
June	122	200	231.6	1.6	1.9
July	19	15	23.5	0.8	1.2
August	21	13	23.0	0.6	1.1
September	20	3	8.3	0.2	0.4
October	5	1	3.3	0.2	0.7
Totals	579	1,241	1,292.5		

^aPer acre.

^bPounds per acre.

Table 87. Number and weight of fish recovered, per acre, on draining Pond S-14, November 17, 1959.

Species	Number	Weight^a
Channel catfish	180	391.2
Largemouth bass	51	34.5
Fathead minnows	907	2.4
Bluegills	20,918	58.1
Green sunfish	1,862	18.4
Other^b	79	3.7
Totals		508.3

^aWeight in pounds.

^bIncluded *Gambusia*, golden shiners, goldfish and speckled bullheads.

Table 88. Costs and Returns (per acre) associated with the marketing of channel catfish through the sale of fishing permits in Pond S-14 in 1958 and 1959.

Costs	Dollars
Fertilizer, feed and fingerlings	481.46
Total Costs	481.46
Returns	
Sale of fishing permits	593.37
Sale of dressed catfish^a	140.83
Total Returns	734.20
Returns to Capital and Labor	252.74

^aSale of catfish recovered on draining (234.7 pounds of dressed fish @ 60 cents per pound).

Table 89. Subjects included in the CAP program and presenters for each segment.

Subject (Module)	Instructor(s)	Segments
Principles of Aquaculture	Lovshin	10
Water Quality	Boyd	16
Physiology	Saoud	9
Hatchery Management	Phelps	20
Aquatic Animal Nutrition	Davis	12
Genetics and Breeding	Dunham	17
Aquatic Animal Health	Terhune/Hayden	17
Aquaculture Production	Masser/Daniels/Veverica	21
Extension Methods	Jensen	5
Aquacultural Economics	Hanson	9

Table 90. Required courses in the sciences and mathematics required of Undergraduate Majors in the Fish Management Curriculum in the 1946-1947 Academic Year.^a

Biological Sciences	Mathematics	Chemistry	Physics
General Zoology (2)	Advanced Algebra	General Chemistry (2)	General Physics (2)
General Botany (2)	Trigonometry	Qualitative Analysis	
Bacteriology	Analytic Geometry	Quantitative Analysis	
General Entomology	Statistics	Organic Chemistry	
Systematic Entomology			
Genetics			
Principles of Ecology			
Ecology			
Parasitology			
Invertebrate Zoology			
Aquatic Plants			
Aquatic Insects			

^aCurriculum also includes one course in General Soils.

Table 91. Number of regularly scheduled courses in several different categories offered in fisheries, aquaculture and aquatic sciences in seven academic years.

Academic Year								
	'46-'47	'62-'63	'65-'66	'70-'71	'85-'86	'98-'99	'00-'01	'12-'13
Professional orientation						1	2	3
Limnology and related^a	1	2	3	3	4	6	3	4
Fish biology and management^b	7	5	5	7	9	8	12	8
Aquaculture and related^c		2	2	4	10	15	6	8
Fish health				3	8	9	8	5
Genetics and breeding				1	1	1	2	2
Aquacultural engineering	1			1	1	1	1	1
Aquatic flora management					1	2	1	1
Extension methods					1	1	1	1
Other		1^d						
Totals	9	10	11	19	35	44	36	33

^aIncludes all water quality courses.

^bIncludes pond management, ichthyology, ecology, etc.

^cIncludes hatchery management, fish nutrition and fish processing and technology.

^dZoology-Entomology Department taught a course in marine biology for a short time.

Table 92. Elements of Caton's 'Model' for the development of fisheries and aquaculture in LDCs.

Phase I - Project Identification

- a. Determine through in-country surveys the fish culture potential in selected LDCs**
- b. Locate sites for development of research and demonstration stations**
- c. Determine interest in country/mission-funded projects**

Phase II - Staff and Facility Development

- a. Develop an appropriate technical staff at Auburn**
- b. Provide supervision of construction and operation of research and demonstration facilities in LDCs**
- c. Provide in-country technical assistance**
- d. Begin to remove major constraints to aquacultural development through applied research**
- e. Provide training at Auburn for scientists from participating countries for operation and management of their facilities**

Phase III - Develop Appropriate Outreach Programs

- a. Assist in the organization of extension programs in participating countries as quickly as possible**
- b. Begin extension effort throughout each participating country**
- c. Develop a network for the exchange of information between participating countries**

Table 93. Information on reports submitted by faculty members from other Auburn University Departments in the implementation of Caton’s “Model” in LDCs.

Faculty Member	Department	Country	R & D Numbers^a
Upton Hatch	AGEC	Panama, Guatemala	33, 37,46
Terry Hanson	AGEC	Guatemala, Honduras	37,39
Curtis Jolly	AGEC	Rwanda	34
Ed McCoy	AGEC	El Salvador, Philippines	6,11,12,13,21,24
Joe Molnar	AGEC	Rwanda	38
Paul Starr	SOCY	Central and West Africa	28
Don Street	ECON	Jamaica, Colombia, Central and West Africa	19,20, 28

^aNumber in the Research and Development Series where the referenced report appears.

Table 94. Chronological list of ‘short-term’ surveys conducted in LDC’s under contract AID/csd-1581 (July 1, 1967-June 30, 1969).

Dates	Country	AU Team
Sep 2 - Oct 12, 1967	Philippines	Swingle and Moss
Oct 12 - Oct 18, 1967	Taiwan	Swingle and Moss
Oct 18 - Oct 23, 1967	Japan	Swingle and Moss
Oct 23 - Oct 29, 1967	Vietnam	Swingle and Moss
Oct 29 - Nov 12, 1967	Thailand	Swingle and Moss
Nov 13 - Nov 16, 1967	Malaysia	Swingle and Moss
Nov 16 - Nov 23, 1967	Thailand ^a	Swingle and Moss
Nov 23 - Nov 29, 1967	East Pakistan	Swingle and Moss
Nov 29 - Nov 30, 1967	Nepal	Swingle and Moss
Nov 30 - Dec 17, 1967	India	Swingle and Moss
May 14 - June 4, 1968	Philippines ^b	Swingle and Smitherman
Jun 4 - June 18, 1968	Thailand ^c	Swingle and Smitherman
Jun 18 - Jun 27, 1968	East and West Pakistan	Swingle and Smitherman
Oct 27 - Nov 23, 1968	East Pakistan ^d	Swingle, Schmittou and Rogers
Nov 23 - Nov 29, 1968	Thailand ^e	Swingle, Schmittou and Rogers
Nov 29 - Dec 7, 1968	Philippines ^e	Swingle, Schmittou and Rogers
Dec 7 - Dec 9, 1968	Hong Kong	Swingle, Schmittou and Rogers
Apr 5 - Apr 11, 1969	Senegal	Moss, Pardue and Danner
Apr 11 - Apr 12, 1969	Cameroon	Moss, Pardue and Danner
Apr 12 - Apr 19, 1969	Central African Republic	Moss, Pardue and Danner
Apr 26 - May 3, 1969	Nigeria	Moss, Pardue and Danner
May 3 - May 9, 1969	Togo	Moss, Pardue and Danner
May 9 - May 17, 1969	Ghana	Moss, Pardue and Danner
May 17 - May 23, 1969	Senegal	Moss, Pardue and Danner

^aSecond visit to Thailand to conduct survey in areas not included in the first visit.

^bSecond visit to the Philippines to extend survey into areas not included in the first visit.

^cThird visit to Thailand extended survey to marine fisheries and brackishwater aquaculture which were not included in first survey.

^dThird visit to East Pakistan to complete survey initiated earlier.

^eVisit to continue the implementation of Caton’s *Phase II*.

Table 95 . Implementation activities funded by Task Orders attached to AID/csd-2270.

Task Order Numbers	Country	Activity Funded
1	World-Wide	Funded continuation of implementation activities
2, 7 and 9	Thailand	Implementation of <i>Phases II and III</i>
3,4 and 8	Brazil	Implementation of Phases II and III

Table 96. Chronological list of surveys conducted in LDCs under contract AID/csd-2270, during the period August 14, 1969-May 11, 1971.

Dates	Country	AU Team
Aug 14 - Aug 19, 1969	East Pakistan	Swingle, Pardue and Schmittou
Oct 6 - Oct 18	Colombia	Swingle and Pagan
Oct 18 - Oct 28	Ecuador	Swingle and Pagan
Apr 27 - May 22, 1970	Panama	Moss and Smitherman
May 22 - June 6	Peru	Moss and Smitherman
Jun 6 - Jun 18	Paraguay	Moss and Smitherman
Jul 6 - Aug 14	Philippines	Swingle and Allison
Nov 11 - Nov 13	Malaysia	Swingle and Allison
Dec 3 - Dec 9	Israel	Swingle and Allison
Jan 10 - Jan 16	Colombia	Smitherman
Feb 15 - Mar 5, 1971	El Salvador	Moss
Mar 15 - Mar 19	Costa Rica	Moss and Lovell
Mar 14 - Mar 15	Nicaragua	Moss and Lovell
Mar 19 - Mar 20	Panama	Moss and Lovell
Mar 21 - Mar 22	Puerto Rico	Moss and Lovell
Mar 22 - Mar 27	Haiti	Moss and Lovell
Mar 21 - Apr 2	Ecuador	Swingle
Apr 2 - Apr 9	Puerto Rico	Swingle
May 10 - May 15	Panama	Moss
May 11 - Jun 7	Peru	Moss

Table 97. List of specific Task Orders attached to AID/ta-BOA-1152 for the continued implementation of Caton’s ‘Model.’

Task Order Number	Country Involved
1	Tanzania
2	Brazil^a
3	Colombia/Panama
4	Zaire
5	Colombia
6	Indonesia
7	Central African Republic^b
8	Honduras
9	Colombia
10	Zaire

^aFunding for Lovshin’s continuing long-term project in northeast Brazil.

^bFunding for this project later changed to AID/csd-2780.

Table 98. Primary objectives of the 211-d, *Institution Building Grant* – AID/csd-2780.

- 1. Add faculty with specific professional expertise in selected fields.**
- 2. Develop a library of world-wide literature on aquaculture.**
- 3. Develop more effective methods of disseminating information to LDCs.**
- 4. Provide educational opportunities in aquaculture for AID personnel, for personnel of other governmental agencies, for personnel of private foundations, for American students interested in development and for foreign participants.**
- 5. Develop a collection of data on fishes and other aquatic organisms from throughout the world that appear suitable for culture.**

Table 99. List of institutional support/implementation contracts funded through Title XII.

- 1. AID-DSAN-C-0053 (*The University Services Contract*) (April 1, 1977 – March 31, 1982)**
- 2. AID/DSAN-G-0039 (*Aquaculture Technology Development and Technology Transfer Grant*) (September 15, 1978 – April 30, 1984)**
- 3. AID/DSAN-G-0150 (*Matching Formula Strengthening Grant*) (July 9, 1979 – June 30, 1984)**
- 4. AID/DSAN-G-1314 (*Title XII AID/AU Cooperative Agreement/Program Support Grant*) (January 1, 1982 – December 31, 1987)**
- 5. AID/DAN – 5058-G-55-6073-00 (*Title XII Program Support Grant/Aquaculture and Managed Fish Production*) (September 29, 1986 – September 29, 1988)**
- 6. AID/DAN-4180-A-00-8008-00 (*Title II AID/AU Cooperative Agreement/Aquaculture Technology Development Program*) (January 1, 1988 – December 31, 1992)**

Table 100. List of short-term assignments to LDCs completed by ICA faculty in six months of 1979 (April-September).

Countries Visited and Number of Visits^a
Cameroon
Colombia (7)
Honduras (2)
Italy
Jamaica (2)
Liberia
Nigeria
Panama (3)
Thailand
Zaire

^aEach country visited one time unless indicated otherwise.

Table 101. Statistics on ‘short-term’ visits by Auburn faculty and staff to other countries, during three different years (1986, 2008 and 2010).

Statistic	Years		
	1986	2008	2010
Countries visited	29	21	28
Number of person involved^a	18	27	24
Total visit-days	560	748	797

^aNumber of different persons involved.

Table 102. Countries where Auburn faculty served on 'long-term' USAID-funded assignments.

Countries	Years 1^{a,b}	Publications^c
Brazil	Nov, 1969 - Dec, 78	1,2,8,9,10,14,26
Philippines	Jul, 1971 - Dec, 1978	25,32
Panama	Aug, 1971 - Dec, 1987	46
El Salvador	Sep, 1971 - Oct, 1976	6,9,15
Nigeria	Jun, 1975 - Dec, 1979	30
Indonesia	Oct, 1976 - Aug, 1991	23,29
Colombia	Feb, 1977 - May, 1980	27
Jamaica	Jan, 1977 - Dec, 1983	31
Honduras	Feb, 1977 - Dec, 1998	39
Egypt	Jul, 1981 - Dec, 1994	
Rwanda	Mar, 1983 - Apr, 1994	34
Ecuador	1985 - 1987	
Kenya ^d	1997 - 2003	
Uganda ^e	Jun, 2005 - Sep, 2008	

^aThe list includes details on the year of the initial long-term assignment in each country, and the interval (years) that Auburn faculty were in-country; although they may not have been there continuously for the entire interval.

^bAssignments in a specific LDC, within an interval may have involved more than one contract or agreement.

^cResearch and Development Series Numbers in which reports from long-term assignments are published.

^dReports are not part of the Research and Development Series. They are available from: PD/A CRSP Annual Reports (16th - 21st).

^eFinal Report is not part of the Research and Development Series. It is available from: <http://www.ag.auburn.edu/fish/international/uganda/>

Table 103. Record Groups and Accession Numbers of collections of Fisheries Program Annual Reports, maintained in the Special Collections and Archives Department of the Ralph B. Draughon Library.

Record Group	Accession Number	Years Included	Date Submitted	Submitted By
240^a	04-024	1963-2003	Nov 1, 2004	W.A. Rogers
240^b	08-027	1956-1984	Dec 14, 2009	D.R. Bayne
240	97-029	1934-1977	Mar 13, 1997	W.D. Davies
240	97-068	1958-1975	Jul 9, 1997	Unknown
240	98-016a	1936-1976	Apr 24, 1998	Unknown

^aAll Fish P&D Reports.

^bMostly Lawrence/Bayne Work Group (weed control and environmental monitoring).

Table 104. List of Record Groups and Accession Numbers of Archive collections of various prints and negatives related to the Auburn Fisheries Program.

Record Group	Accession Number	Years Included	Date Submitted	Submitted By
240^a	00-076	1934-1980s	Oct. 6. 2000	Duncan
240^b	88-45	1934-1994	Jan. 11, 1999	Various

^aContains a large number of prints and negatives. Large number are ICA related. Also, a large number are related to the celebration of Swingle's 100th birthday.

^bLarge collection of blue negatives, prints and slides. This collection contains many of the oldest photographs related to the Auburn Fisheries Program. Some of them have been copied and placed in the Media Gallery on the School web-site.