## THE RESULTS OF MIDSUMMER STOCKING OF BLUEGILLS IN FISH PONDS

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The bluegill bream under normal conditions reproduces throughout the summer in the Southeast beginning when the water temperature rises to 80 degrees F in early summer and continuing until the water temperature drops below 80 degrees F in early fall. Because of this fact, several state and federal fish hatcheries have reared and distributed two crops of bluegills annually. The first crop has usually been distributed in July or early August and the second crop in the late fall or winter

For several years there has been some question among fishery workers as to whether bream fingerlings stocked in midsummer from the first bluegill crop reproduced before cool weather and before bass fry or fingerlings were added the following spring. Of course if these early-stocked bream did reproduce the pond would no doubt become overcrowded with bream and furnish poor fishing.

During normal fish pond checking operations in the summer of 1951, 17 ponds were analyzed which were stocked with bluegills in the midsummer of 1948 or 1949 and with bass the following spring. All 17 ponds, without exception, were found to be overcrowded with bream to the extent that both bream and bass had stopped reproducing (Table 1). These ponds were furnishing practically no fishing.

Table 1. Results of summer stocking of bluegills in farm fish ponds.

Name of	<del></del>		Bream <sup>b</sup>	Size of
Pond	Location	Size a	Stocked	Bream
Helms	Enterprise	½ acre	8/17/49	2
Jones	New Brocton	6 acres	8/7/49	2
Stovers	Evergreen	10 acres	7/23/49	1
Pate	Evergreen	1 acre	7/23/49	1
Grant	Evergreen	¾ acre	7/23/49	1
Padgett	Evergreen	2 acres	7/23/49	1
King	Evergreen	2 acres	7/23/49	1
Watson	Andalusia	1½ acres	7/23/49	1
West	Mobile	15 acres	8/22/49	2
Williams	Finchburg	4 acres	8/3/49	2
Petrey	Montgomery	4 acres	7/19/49	2
Carlisle	Montgomery	10 acres	7/15/49	2
Underwood	Montgomery	4 acres	7/29/49	2
Bassett	Troy	4 acres	7/15/48	2
Barbaree	Troy	8 acres	7/15/48	$oldsymbol{2}$
Franklin	Troy	1 acre	7/15/49	$\overset{-}{2}$
Pinckard	Troy	6 acres	7/15/48	2

a All ponds become overcrowded with bluegill.

b Bass were stocked as fry the spring following bream stocking.

Stocking records showed that these ponds had been stocked with 1,000 bluegills and 100 bass per acre as is generally recommended for fertilized ponds. The pond owners indicated that they had applied fertilizer to their ponds periodically. However, about 50% of the owners stated that they had used somewhat fewer applications than are generally recommended.

Possibly the two major reasons for the rearing of two crops of bluegills annually are public pressure to obtain fish as early as possible and the general belief that a much greater production is obtained from two crops. However, records from the Alabama State Fish Hatchery at Eastaboga showed that a higher production has been obtained from one crop rather than two crops annually (Table 2). In addition, heavy mortalities occur during pond draining and fish distribution operations in the summer.

Table 2. Production of Alabama State Fish Hatchery at Eastaboga for 1949 and 1950.

	Year	Production per acre	
2 crops a	1949	143,734	
-	1950	97,908	
1 crop	1949	154,345	
-	1950	132,083	

<sup>&</sup>lt;sup>a</sup> First crop harvested in July or early August. Second crop harvested in late fall or winter.

From the results obtained, it would seem to be more practical from both a hatchery and fishpond viewpoint to produce only one crop of bluegills annually and distribute them in the fall or winter months.