

EXPERIMENTAL LARGEMOUTH BASS
STUDY AT EAST PARK RESERVOIR

OBJECTIVE OF STUDY

TO COMPARE THE TEXAS FORM OF THE NORTHERN LARGEMOUTH BASS, WHICH APPARENTLY SPAWNS EARLIER AND GROWS FASTER, WITH THE NORTHERN LARGEMOUTH BASS COMMONLY FOUND IN CALIFORNIA.

INFORMATION SOUGHT

MORTALITY & SURVIVAL RATES

HABITAT PREFERENCE
SCHOOLING PATTERNS

SPAWNING PERIODS

GROWTH RATES AND
GENETIC MAKEUP

METHOD

FIVE HUNDRED FISH OF EACH GROUP WILL BE TAGGED WITH \$5 REWARD TAGS. THE GROUPS WILL BE TAGGED ON OPPOSITE SIDES (NORTHERN-RIGHT, TEXAS-LEFT). TAG RETURNS BY ANGLERS WILL PROVIDE ESTIMATES OF ANGLING MORTALITY, NATURAL MORTALITY, AND SURVIVAL.

ABOUT 1,000 FISH FROM EACH GROUP WILL RECEIVE NONREWARD TAGS (NORTHERNS-RIGHT SIDE, TEXAS-LEFT SIDE). THESE TAGS WILL PROVIDE SOME INFORMATION ON MORTALITY AND SURVIVAL. HOWEVER, THEIR MAIN FUNCTION * WILL BE TO PROVIDE A MEANS OF IDENTIFYING FISH AS TO GROUP WHEN OBSERVED IN THE WATER OR WHEN COLLECTED BY ELECTROFISHING.

IN EARLY MARCH WE WILL BEGIN ELECTROFISHING AREAS OF SHORELINE WHERE BASS ARE LIKELY TO SPAWN. FOLLOWING AN ESTABLISHED SCHEDULE, WE WILL MOVE THROUGH THESE AREAS COUNTING THE NUMBER OF MALES ON NESTS BY GROUP.

IN THE FALL, ²⁰⁰ FISH WILL BE COLLECTED FOR LENGTH/WEIGHT INFORMATION AND RETURNED TO THE WATER. TWO-HUNDRED YOUNG-OF-THE-YEAR WILL BE SYSTEMATICALLY COLLECTED FOR LABORATORY ANALYSIS TO DETERMINE THE GENETIC MAKEUP OF THE POPULATION. BASED ON THE INCIDENCE OF CERTAIN ENZYME PATTERNS, JUDGEMENTS CAN BE MADE WITH RESPECT TO SURVIVAL AND SPAWNING PERIODS OF THE TWO GROUPS.

Tag September
Stocking Early October.

#5 - 500 Tex. NR - 1000 Tex. left side	500 North - #5 1000 North. - NR right side
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INFORMATION SOUGHT

METHOD

FECUNDITY

EARLY IN THE SPAWNING SEASON, A SMALL NUMBER OF FEMALES FROM BOTH GROUPS WILL BE SACRIFICED AND THE NUMBER OF EGGS PER FEMALE COUNTED.

PERIOD OF STUDY

OCTOBER 1978 -- OCTOBER 1981

Proposed electrofishing schedule.

B.B 40,000 A.F

S.G. 20,000

EJ 15,000

LMB - 30,000 F.

RSE - 300

BCR - 400

CCF - 10,000-20,000 this fall

YF's - 2,000-3,000

Bull heads present.