

## Benefits

Local money  
More jobs  
Selling own goods  
Improve farming  
Schools  
Improve healthcare  
Local income  
Good sport  
Act as control for predator species

## Disbenefits

Uncertain effects  
on other species

Disturbance will  
disturb ducks

Maybe clearing  
will affect Grebe



## Update 1

Q1 Why? Villagers can't afford the equipment eg scuba, strong lines boats etc.  
Mostly unable to swim

Q2 What?  
Unable to breed  
Loss of breeding performance  
Predation by Bass - or another predator  
Loss of nesting sites  
Competition for food resources  
Pollution  
Changes in weather

# Update 2

Q1 Likely max population 528  
(264 pairs)  

$$\left( \frac{15 \text{ miles} \times 5280}{300} \right)$$

Q2 By 1965?

1960	200* (100 pairs)
1961	(100 - 25* survive) 400 end of yr!
1962	Have 400 - 1000 (300 survive) ← 700

## Updates

4

3

COMPETITION FOR

1. FOOD, RESOURCES AND NESTING SITES.

HYBRIDISATION?

2. UNBALANCE BECAUSE THEY REPRODUCE IN LARGE NUMBERS RAPIDLY AND PREDATE ON MOST OTHER SPECIES IN THE LAKE.  
e.g. Baby GREBES BEING SNATCHED BELOW FROM BASS.

1. Birds and other fish species population would go down further.  
SPECIES THAT FEED ON FISH<sup>+ crabs</sup> THAT ARE ON THE BOTTOM OF THE FOOD CHAIN WILL DIE OUT.

2. Maybe supply the villagers with new equipment to hunt the black bass - OR CLOSE THE PROJECT

## Update 5

- ① REEDS PROVIDE A SAFE SANCTUARY FOR WILDLIFE/ NESTING SITES.
- ② Black Bass will eat the Bluegills giving other species the chance to increase their populations again. Starting them in the refuge would determine their ability to survive/ breed in this environment.

## Update 6

- 1 LOSS OF SHALLOW WATER WOULD REDUCE NUTRIENT RECYCLING
  - LOSS OF HABITAT FOR SMALLER SPECIES LOWER IN FOOD CHAIN-KNOCK ON EFFECT TO OTHER LAKE SPECIES
  - LOSS OF NESTING SITES
2. INCREASED POLLUTION AND LOSS OF WILDLIFE. ALGAL BLOOMS ATTEMPTS TO TREAT THE WATER MIGHT ADD TO THE PROBLEMS. IN ANY CASE IT BECOMES MUCH LESS DESIRABLE FOR HUMANS (AND TOURISTS)

1. EFFECTS OF DISEASE AND OTHER FACTORS ARE MUCH MORE SEVERE ON SMALLPOPS.

INCREASED INBREEDING

LOSS OF GENETIC VARIETY MAKES THEM SUSCEPTIBLE TO (EG) DISEASE, MUTATIONS

2. DNA COMPARISONS WITH GREBES ELSEWHERE SHOULD REVEAL WHETHER OR NOT INBREEDING HAS OCCURRED

3. THEY HAVE CONSUMED MANY OF THEIR FOOD SPECIES.

REPLACEMENT OF THESE FOOD SPP AFFECTED BY THE POLLUTION AND LOSS OF NUTRIENT