

Lecture 4a



Carp and Trout

Carp



- ❧ By mass Carp are the most commonly farmed freshwater fish in the world
 - ❧ Also been farmed for longer than any other fish
 - ❧ Mostly farmed extensively in China
- ❧ Most domesticated fish in the world
 - ❧ Very different from wild fish
 - ❧ Body shape
 - ❧ Feeding habits
 - ❧ Spawning



Carp



- ❧ Today Carp is a popular aquaculture species throughout Europe and Asia
 - ❧ Can feed on plant material
 - ❧ Cheaper to produce
 - ❧ Grow fast
 - ❧ Can tolerate cold and warm water
 - ❧ Will grow well in water above 13°C
 - ❧ Spawn naturally when water temp above 20°C
 - ❧ Disease resistant



Carp



- ❧ Many different kinds of carp
 - ❧ Polyculture
 - ❧ Silver Carp – feeds on phytoplankton
 - ❧ Bighead Carp – feeds on zooplankton
 - ❧ Grass Carp – Feeds on plant matter
 - ❧ Common Carp – Generalist feeders, prefer insect larvae
- ❧ Can grow all 4 species together in the same pond
 - ❧ Feed in different ecological niches
 - ❧ No competition



Trout



- ❧ Most well established aquaculture species in South Africa
 - ❧ Trout are a highly sort after table fish
 - ❧ Very good to eat
 - ❧ High Value
 - ❧ Long history of farming
 - ❧ Easy to breed in captivity
 - ❧ Have good growth rates
 - ❧ Very high marketability



Trout



- ❧ Why are we not all farming trout?
 - ❧ Cold water species
 - ❧ Only a few suitable sites in SA for growing outdoors
 - ❧ Very sensitive to water quality and oxygen depletion
 - ❧ Require high flow rates
 - ❧ Carnivorous fish – requires high quality, high protein diet
 - ❧ Very expensive
 - ❧ Higher start up costs and higher risk
 - ❧ Higher price
 - ❧ Bigger rewards



Trout



- ✧ Trout grow best at 14-16°C
- ✧ For spawning water must be below 11°C
 - ✧ Trout produce about 1000 eggs/kg

