

LAKE KARIBA FISHERIES- ZIMBABWE

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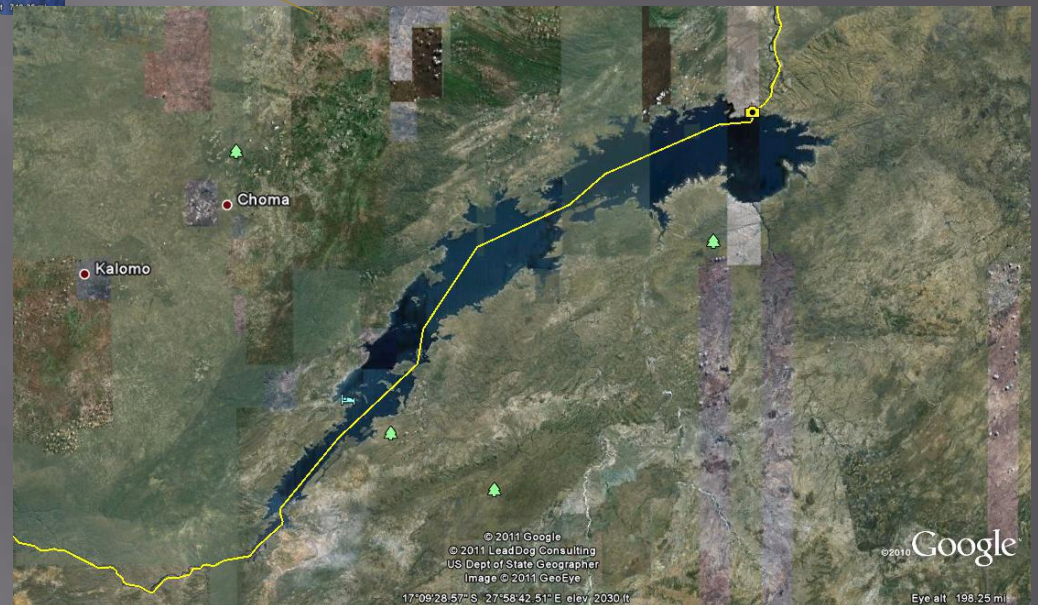
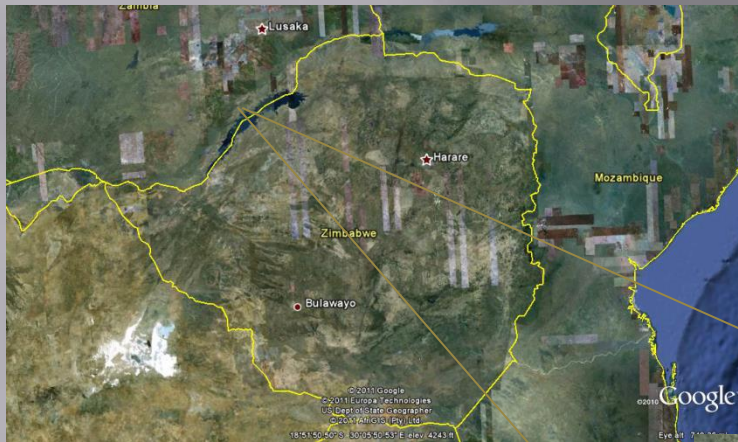
Ministry of Environment, Water
and Climate

Zimbabwe Parks and Wildlife
Management Authority

Lake Kariba Fisheries Research Institute



Lake Kariba



Background

- ▣ 1959 – Lake Kariba Established
- ▣ Commercial Kapenta fishery – 400 fishing rigs
- ▣ Artisanal Fishery – 41 fishing villages along lake shoreline
- ▣ Aquaculture – predominantly *O. niloticus*



Target Species



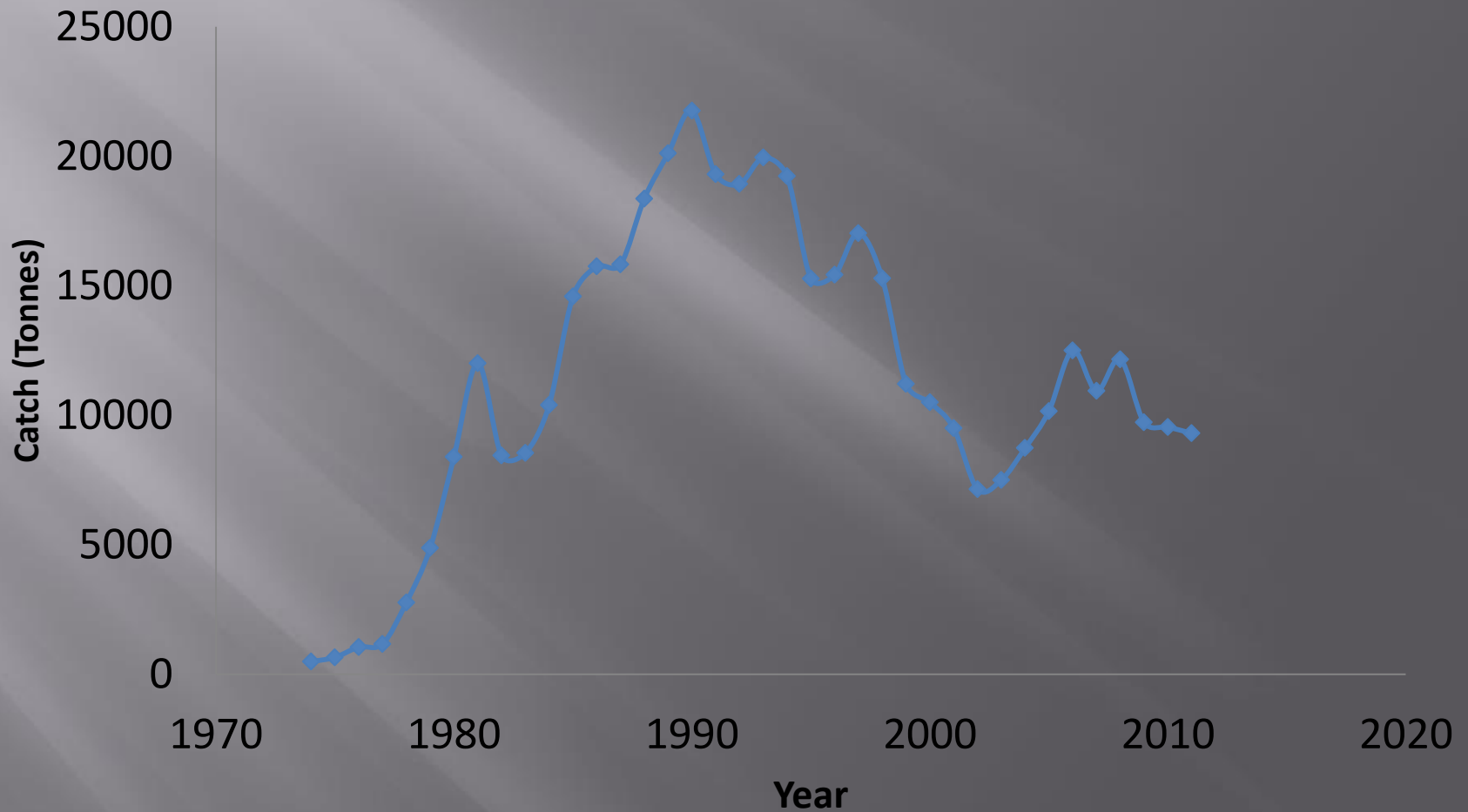
Kapenta – *Limnothrissa miodon*



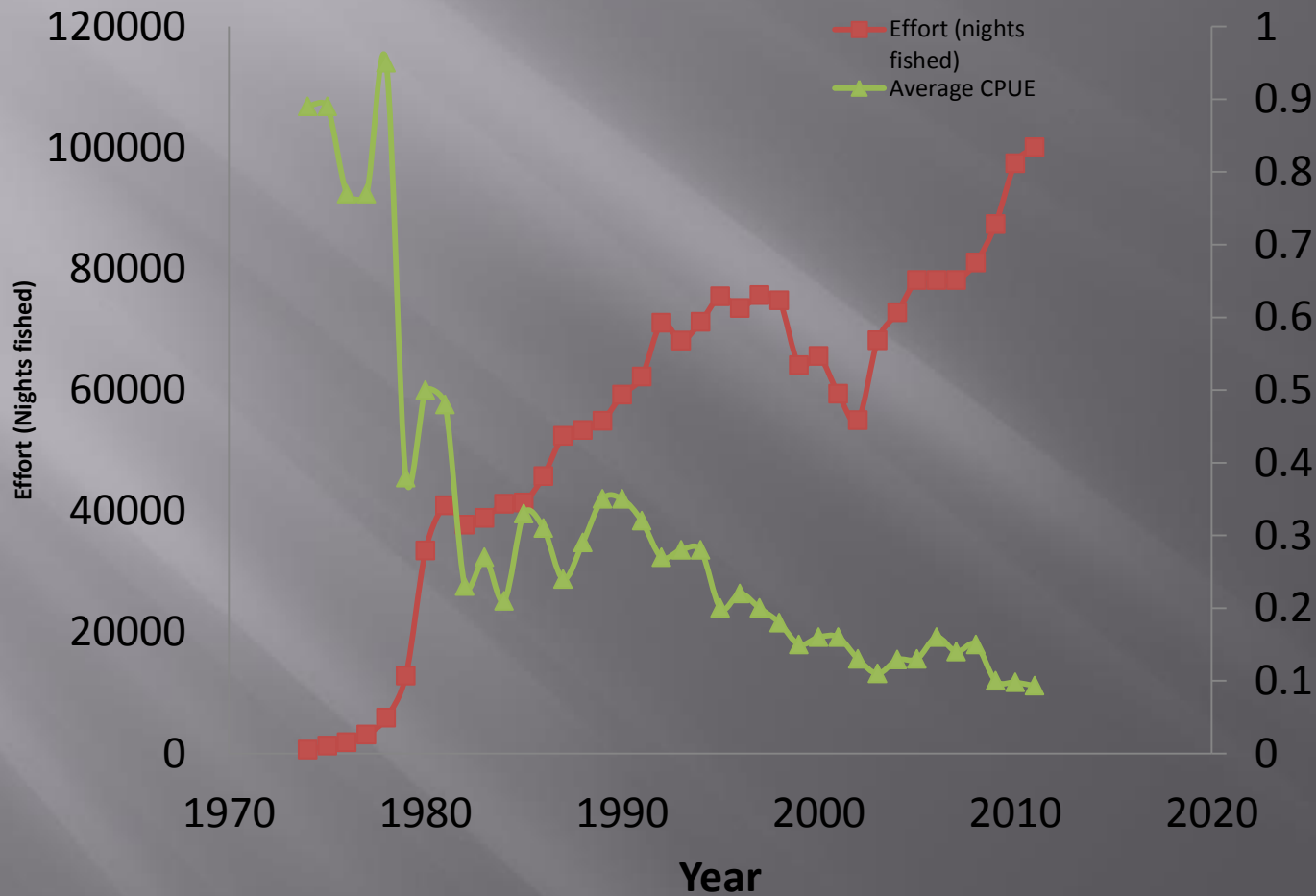
- ▣ Shared stock for Zimbabwe and Zambia
- ▣ Introduced in the late 1960's
- ▣ Data on catch and effort 1974 – 2013 for both Zimbabwe and Zambia – Catch returns
- ▣ Attempts on stock assessment – Hydroacoustic surveys, Maximum entropy model, Golan, 1996)
- ▣ Catch has dropped from 30,000 tonnes in 1989 to 18,000 tonnes/annum currently



Kapenta Catch trends



CPUE and Effort Trends



Artisanal Fishery - *Oreochromis niloticus*

- ▣ 12 fish species exploited in artisanal fishery – 4000 tonnes annual production
- ▣ New species – Red claw crayfish – *C. quadricarinatus*
- ▣ *O. niloticus* exotic species with commercial appeal
- ▣ Dominating artisanal fishery catches in recent times...but has led to near extinction of indigenous fish species
- ▣ Catch data from experimental gillnetting (1960's – present) –length, weight, sex, gonad stage and net mesh size recorded
- ▣ Artisanal catch data from 1980 – 2000, scanty data from there onwards



Expectations

- ▣ To learn about a new approach to stock assessment (WOE) to augment already existing stock estimates so as to assist management in making informed decisions especially on effort allocation based on current available data on fish stocks.



Thank you