Habitat management of critically endangered species *Aythya innotata* in Lake Bemanevika Protected Area and Sofia Lake Marotolana, Bealanana District, Region Sofia.

Presented by:
RASOAMIHAINGO Laurence Adel



INTRODUCTION

- Madagascar Pochard (*Aythya innotata*): extremely rare and medium-sized diving duck
- Endemic to Madagascar
- Considered probably extinct by scientific authorities and researchers (2006)
- Rediscovered in 2006 (Rene De Roland, 2007)
- Pochard breeds on just one small lake, Matsaborimena
- Sofia Lake: potential suitable release site for Pochards





Figure 1 : Aythya innotata adult mal and female in Matsaborimena lake (Rasoamihaingo , 2019)

OBJECTIVES and INTERESTED IN YOUR TRAINING

- Main aim: study of the species and habitat use and manipulation of the habitat in order to properly manage the sites at which it occurs
- Several potential uses for statistical modelling in this work:
 - ✓ Model survival rates of wild and translocated Pochards
 - ✓ Determining the causes of mortality leading to low breeding success in the wild population
 - ✓ Model population trends of other species at the sites where Pochards occur, including the invertebrates that Pochards eat
 - ✓ Compare the effects of habitat management interventions on aquatic plant growth and invertebrate abundance



EXAMPLES OF RESULTATS

- Breeding period and flihgt successful of chicks
- observation of chicks 2017 and 2018
- maximum number of chicks observed in November and minimum January

Diets

- dominated by Chrinomid with density over 771 individuals / m^2
- other benthic macro-invertebrates with a density of less than 331 individuals / m²
- low density of macroinvertebrates but the site has a high specific richness

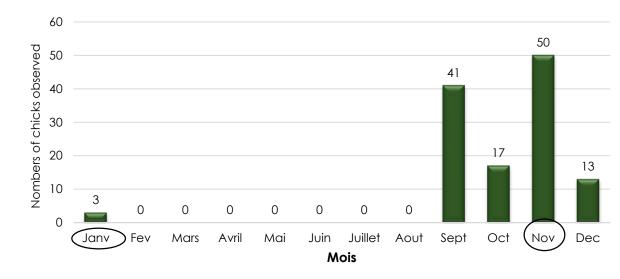


Figure 2: Monthly number of chicks observed between 2017 and 2018.

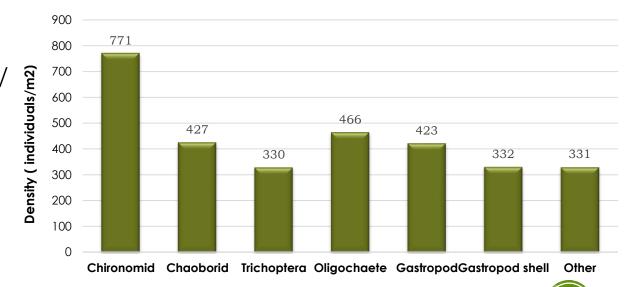


Figure 3:Density of invertebrates collected (individuals / m²) at the Sofia Lake.

