TITLE: SUCCES OF REPRODUCTION OF MADAGASCAR BUZZARD AND SIBLICIDE

Background: The siblicide is phenomenon observed especially in MFE, but rarely observed in MBD. The existence of this phenomenon is still doubtfull in MBD and the cause is unknown.

STATISTICAL QUESTION: Does the rate of feeding affects the siblicide ?

MECHANICAL QUESTION

How does feeding influence the rate of siblicide?

- **STATISTICAL QUESTION:**

Does the rate of feeding affects the siblicide ?

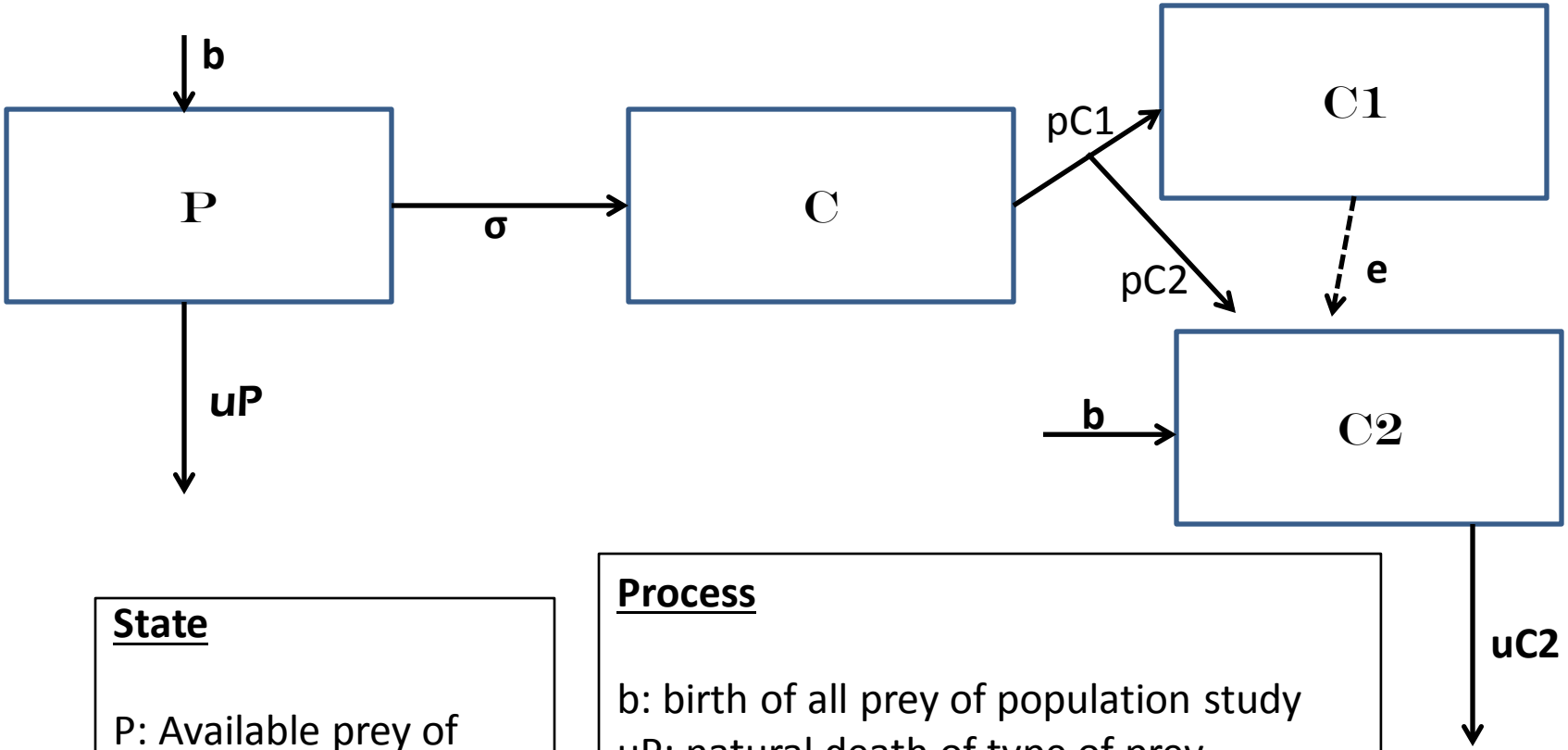
- **Response variable:** presence/absence of siblicide = second chicken killed or not
- **Predictor variables:** prey of feeding of C1 efficient or not /quantity of prey collected enough for C1 and C2 or not
- **Family:** binomial
- **Link:** logit
- **Hypothesis:** Quantity of feeding of chick is related with presence or absence of siblicide.
- R CODE

glmr(siblicide ~rate of feeding, family = '' binomial '', link=logit,data= my data)

BRIEF SUMMARY OF THE DATA USING

I had the data about quantity of prey collected by adults during breeding period. The of prey collected by adults is quantified. The female feed the two chicks. When the first chick had more beaked, both chick survive cause prey collected are enough. If it was not enough, the first chick killed his brother or sister. Finally, we get the rate of siblicide and the rate of feeding.

MECHANISTIC QUESTION : How does feeding influence the rate of siblicide?



State

P: Available prey of Madagascar Buzzard
C: Prey collected by adults
C1:chicken 1 feeding
C2: chicken 2 eating

Process

b: birth of all prey of population study
uP: natural death of type of prey
σ: rate of prey collected by adults
pC1: rate of prey feeding to C1
pC2: rate of prey feeding to C2
e: rate of C2 killed by C1
uC2: rate of C2 killed

NEXT STEPS

- Conduct more thorough sampling of *Buteo brachypetrus* about siblicide to augment data suggesting that disponibility of prey affect this phenomenon
- Conduct further field studies in other regions of Madagascar to determine if the habitat limited the existence of siblicide or a specific prey is the reason of this apparition