

The survey of the water buffalo populations in Thale Noi, Phatthalung Thailand

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Abstract

We selected 5 sites in Thale Noi, Patthalung province in Thailand. Each site was 50-90 m apart from another. We flied drones 90 m high from the ground to take pictures of the buffalo populations in each site. We identified the males, females and calves of each population and identified their colors.

The result show that the highest numbers of buffaloes were found in site 4, and lowest numbers of buffaloes were found in site 1 (Figure 5) because site 1 is far from the city and very few people live in there. On the other hand, site 4 is near to the city, and many people culture buffaloes. In all sites, males were more than females and calves (Figure 6) because people prefer to culture more male buffaloes than females and calves, as they can sell them. Male buffaloes have more demand than females and calves. In most of the sites, white buffaloes were more than black buffaloes, only in site 5, opposite result was observed

Keyword: water buffalo, Thale Noi, Drone

Introduction

In Ihalenoi, people culture buffaloes, those walk and eat around the thaenoi, a major water source of Patthalung. Buffaloes eat grass and some plants. Many birds walk together with the buffaloes to find foods; insects or flies sit on the body of the buffaloes and the birds eat them. Grazing by buffaloes increases native plant and wildlife diversity by reducing water stress and increasing photosynthesis. The buffaloes are very important for balancing ecosystem. For this reason, we would like to study the buffalo populations in Thale Noi, Patthalung province.

Research Questions

1. How many water buffaloes are found in Thale Noi?
2. How many male, female and calf buffaloes are found in Thale Noi ?
3. How about the colors of buffaloes in Thale Noi?

Materials and Methods

Study site and data collection

We selected 5 sites in Thale Noi (Figure 1). Each site was 50-90 m apart from another (Figure 2). We flied drones 90 m high from the ground to take pictures of the buffalo populations in each site.

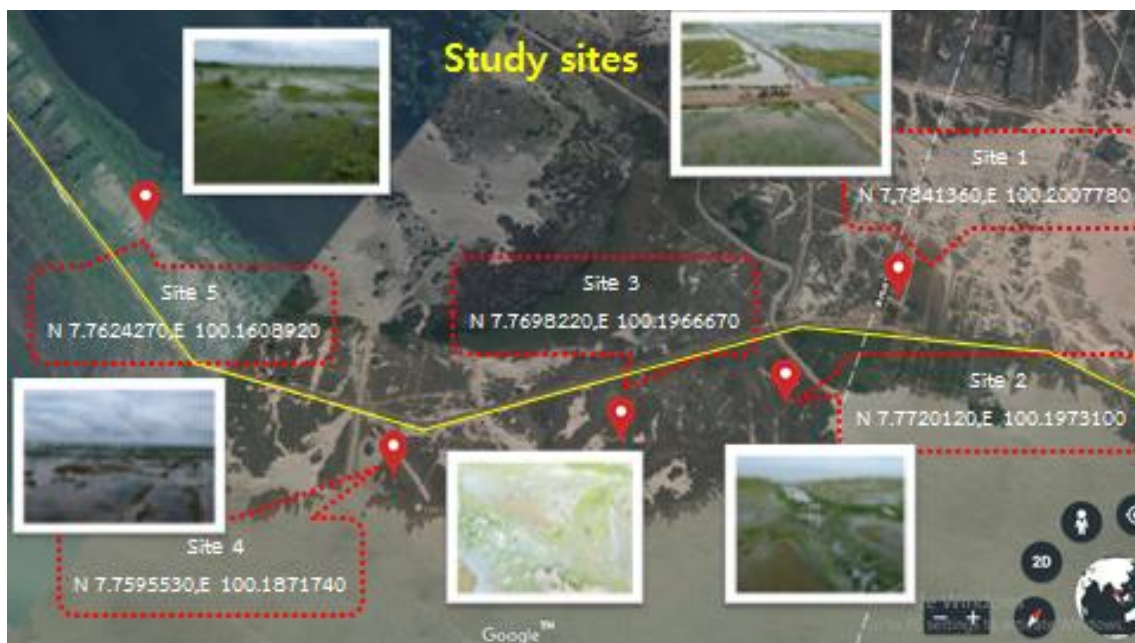


Figure 1: study sites in Thale Noi.

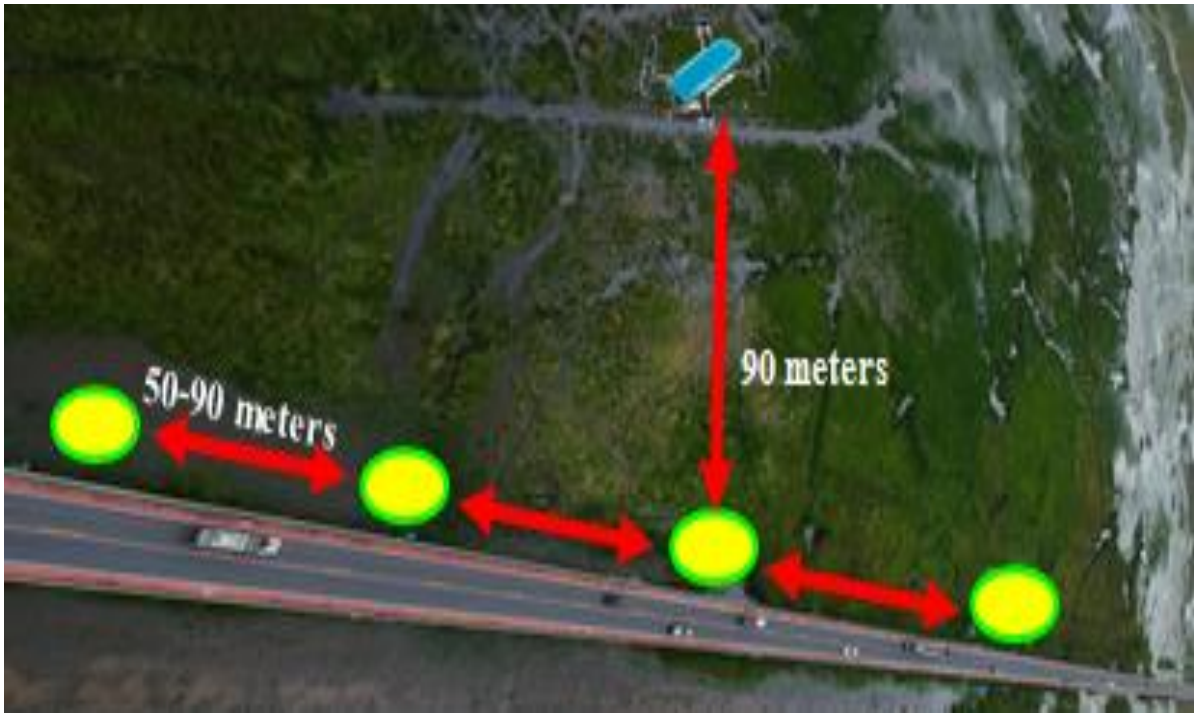


Figure 2: Distances between sites.

We identified the males, females and calves of each population (Figure 3), and identified their colors (Figure 4).



Male



Female



Calf

Figure 3: Identification of males, females and calves



Black colour



White colour

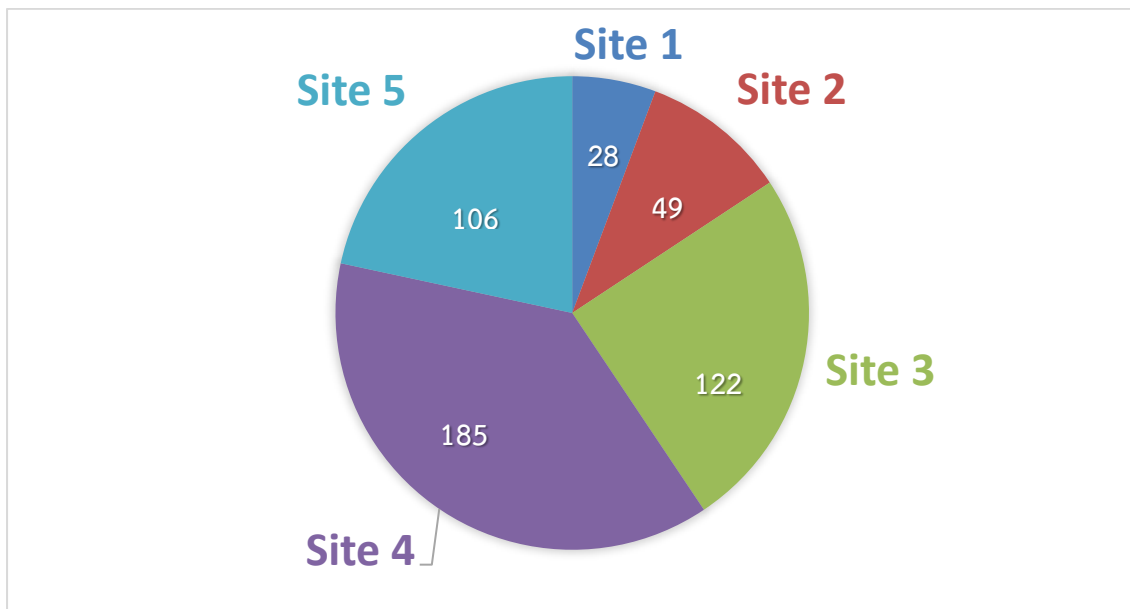
Figure 4: Colors of buffaloes

Results and Discussion

Buffalo numbers

The highest numbers of buffaloes were found in site 4, and lowest numbers of buffaloes were found in site 1 (Figure 5) because site 1 is far from the city and very few people live in there.

On the other hand, site 4 is near to the city, and many people culture buffaloes.



Buffalo Numbers in 5 sites

Figure 5: Buffalo numbers in 5 sites

Ratios of males, females and calves in each site

In all sites, males were more than females and calves (Figure 6) because people prefer to culture more male buffaloes than females and calves, as they can sell them. Male buffaloes have more demand than females and calves.

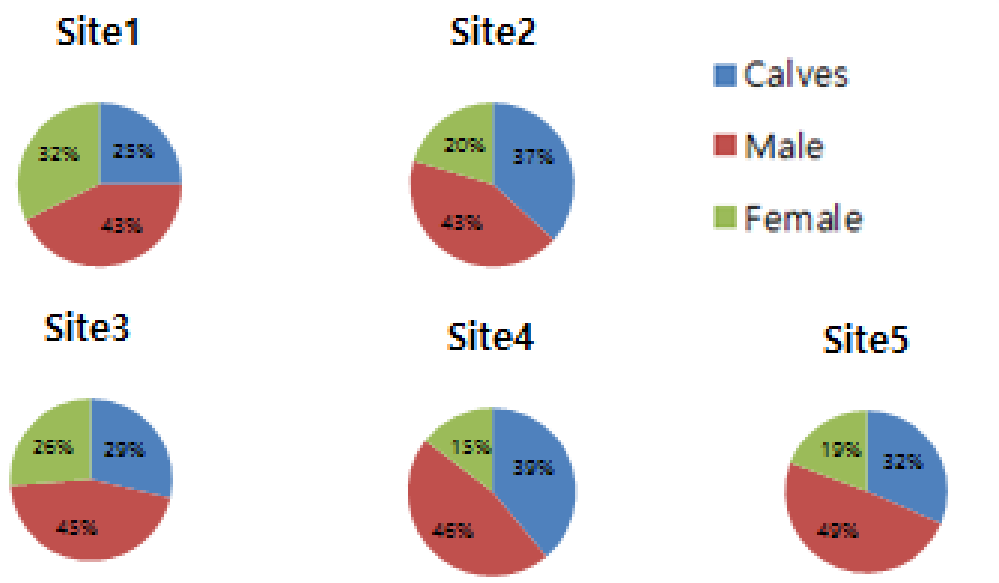


Figure 6: Males, females and calves in 5 sites

Color of buffaloes

In most of the sites, white buffaloes were more than black buffaloes, only in site 5, opposite result was observed (Figure 7).



Figure 7: Body colours of buffaloes in 5 sites

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