



**Research Activity Report**  
Supported by “Leading Graduate Program in Primatology and Wildlife Science”

2017. 08. 01	
<b>Affiliation/Position</b>	Wildlife Research Center/D1
<b>Name</b>	Liu Jie

<b>1. Country/location of visit</b>
China, Yunnan, Lijiang, Laojun Mountain National Park China, Yunnan, west side of Meili Snow Mountain Range, along the Nu river bank
<b>2. Research project</b>
Field work for my PhD study on Yunnan snub nosed monkey
<b>3. Date (departing from/returning to Japan)</b>
2017. 04. 22 – 2017. 08. 01 (103 days)
<b>4. Main host researcher and affiliation</b>
Liao Haohong Affiliation/Position: Lijiang Office of The Nature Conservancy
<b>5. Progress and results of your research/activity</b> (You can attach extra pages if needed)
Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief description.
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">  <p style="text-align: center; margin-top: 5px;">Drone Observation</p> </div> <div style="width: 65%;"> <p>Traditionally, we recorded behavior data on vertical plane observation in overwhelming majority of studies. Observation on horizontal plane is virtually impossible for researchers. Especially in the variety of complex topography. Remote sensing technology is increasingly used to observe wild animal behavior. However, primates are temperamental, quick-witted and sensitive to noise, drone observation for primate was inaccessible for researchers. Drone took a great part in my study during this period of study in the Laojun Mountain National Park. With the help from drone I can always foreclosed the possibility of monkeys' trace in the other parts of Laojun mountain. Therefore, I can search for the monkeys faster and more accurate.</p> </div> </div> <div style="text-align: right; margin-top: 20px;">  <p style="text-align: center; margin-top: 5px;">Fecal samples</p> </div>

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This study tried to conduct an observation study on wild Yunnan snub nosed monkey in Laojun mountain national park by using drone for the first time in China. The drone of consumer level helped me in tracking and positioning monkeys, it showed 20 times higher of encounter rate compared to the same period last year. And drone also joined daily patrol work in Mt. Laojun as first stage. I will try to conduct advanced study by using drone of level which include near real-time mapping of local land cover, monitoring illegal forest activities, surveying of Yunnan snub-nosed monkey and direct behavior observation. Finally, I highlight the potential of drone for environmental and conservation applications. This research will try to find

another way to make primatological researches in the variety of complex topography become more feasible.

However the weather in raining season has lots of adverse effect on drone observation and behavior observation. The sporadic monkey searching was frequently stop by the heavy rain. The solar power didn't work smoothly for me. I had to save all limited electric power supply for drone and torch light. I had my drone crashed because of the out breaking rain on its way back to the landing pad. One propeller lost and another propeller was broken, the other part seemed ok. Fortunately, with the spare propeller the drone still worked fine and I collected 11 fecal samples this time.

The road from observation to Liju village was damaged by the heavy rain, I was trapped in the observation station for



days. And the road from Liju village to Lijiang were damaged by landslide, I had wait for the traffic resumed before I can reach to my office. I am more than a bit depressed for Lijiang Forestry Bureau. I was informed by TNC that the of my mobile camp and observation station was been suspended by Lijiang Bureau, I tried to contact with Lijiang Forestry Bureau together with Mr Liao after place infrared cameras. I will try to figure this out next time when I come back to Lijiang.

## **6. Others**

I very much appreciate to all the rangers for their time and energy to accompany me in the Laojun mountain for conducting my study, and to all the supports from PWS.