Project Update: August 2020

Project Background

To preserve the legacy of Indonesia's rich biodiversity, early-career conservationists must be armed with relevant practical skills and be knowledgeable, not only in their disciplines, but also to integrate knowledge from other fields to find novel solutions. Building their capacity is essential to the success of conservation programmes since the quality of human resources is a key to ensuring conservation goals are achieved. Therefore, we conducted a Conservation Camp, a series of training workshops to build the capacity of students and early-career conservationists.

Project Activities

Our programme is divided into two components: the camp and post-camp activities.

A. Conservation Camp

We conducted the Conservation Camp from 20-29 January 2020 in Bali Barat National Park. In total, 177 people registered for the camp, indicating high interest and demand for capacity building programmes in biodiversity conservation in Indonesia. However, our camp could only accommodate 20 people, and hence we selected only 20 participants based on their interest and involvement in conservation, long-term career plan, and potential to be future leaders in conservation. Seventeen participants attended the camp (the other three cancelled).

Activities

Day 1

- Opening ceremony: Welcoming remarks from West Bali National Park, project officer of conservation camp, and president of Tambora muda.
- Talk 1: Biodiversity conservation by Dr. Cahyo Rahmadi from Lembaga Ilmu Pengetahuan Indonesia/Indonesian Institute of Science.
- Talk 2: Role of Bali Safari for ex-situ conservation by Bali Safari & Marine Park.
- Preparing bird observation for the next day.

Day 2

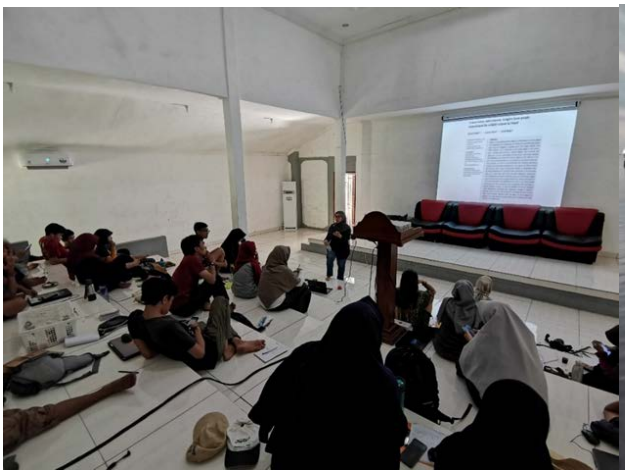
- Bird observation.
- Talk 1: Ecology survey methods.
- Talk 2: Grant writing and tips and trick.
- Talk 3: History of development of conservation law (UU No.5 Tahun 1990) by Nuruliawati from WCS Indonesia Program.

Day 3

- Setting camera traps in the field.
- Talk and workshop: using R for ecological studies and data analysis.


Day 4

- Vegetation survey by Aisyah from Generasi Biologi/ Biology generation.
- Talk: The role of ex-situ conservation by Ardi Wiranata from Friend of The National Park (FNFP).
- The effort of science in conservation by Ulfah Siregar from WCS Indonesia Program.




Day 5

- A vertebrate survey.

- Talk 1: Writing of personal statement by Sheherazade.
- Talk 2: Role of genetic in conservation by Rifa from WCS Indonesia Program.
- Talk 3: Marine conservation by Dewi Ratna from Tresher Shark Project Indonesia.
- Talk 4: Role of stakeholders in conservation and research design to ecology study by Sunarto from WWF.

Day 6

- Talk and workshop: Social study for conservation by Puspita Insan Kamil from Komodo Survival Program (KSP).
- Social survey and analysis.
- Talk: Tips and trick for good presentation by Sheherazade.


Day 7

- Mammal observation.
- Talk and workshop: GIS and analysis by Azmi from KSP.

Day 8

- Talk: Writing of scientific journal by Dr. Nurul L. Winarni from Universitas Indonesia.

- Talk: Leadership by Pramita indrarini from United in Diversity.
- Talk: Conservation policy by Alifi Rehanun Nisya from Leuser Conservation Forum and Farwiza Farhan from Yayasan Hutan Alam dan Lingkungan Aceh (Forest, Nature and Environment of Aceh).


Day 9

- Career couch from West Bali National Park staff, Nurul Laksmi, Farwiza Farhan, and Jane Dunlop.
- Talk: Sustainable business to the community by Ryannyka from LINI foundation and Jane Dunlop.


Day 10

- Oral presentation from participants about field surveys.
- Talk: plastic waste and processing by I Wayan Jeki from Serangan Bebas Plastik (Serangan Zero Plastic).
- Beach clean-up.
- Conservation games.

B. Post-camp Activities

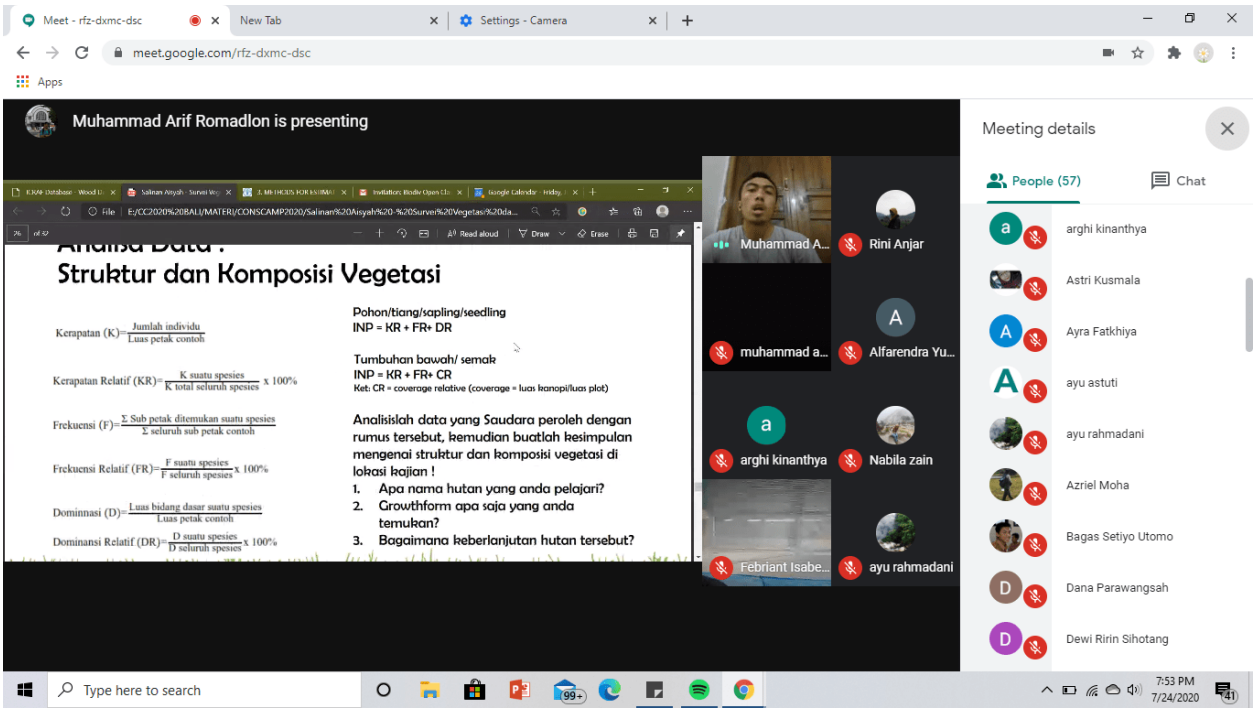
1. Conservation Event

Up to August 2020, three participants had hosted their post-camp activities.

Date	Place/Platform	Number of attendees	Aim of activity
9 February 2020	IPB, Bogor, West Java	26	Introduction to research design, field survey techniques, and data analysis methods.
28 February	Universitas Andalas, Padang, Sumatra	28	- To share experience at Conservation Camp 2020 - To introduce conservation career options and opportunities to first year students.
- Webinar: 24 July 2020 - Field survey: 1 August 2020	- Google Meet - Alas Bromo Forest, Central Java	- 56 - 11	To share knowledge and experience on vegetation survey and carbon estimation learned at Conservation Camp 2020.

Conservation events hosted by Conservation Camp alumni

Left: Research method workshop (9 February 2020). Right: Conservation Camp sharing and career talk (28 February 2020).



Vegetation survey method webinar (24 July 2020)

Vegetation field survey (1 August 2020)

2. Mentoring

In order to ensure that the participants can implement what they learned in Conservation Camp activities, and to help them actively seek conservation career or start their own conservation project, we establish mentoring groups for all participants. The mentoring groups will provide personal and closed-group guidance by well-known mentors from Tambora Muda through bimonthly virtual mentoring sessions, or one-on-one mentoring session if needed.

Below are the short biographies of the mentors:

Ardiantiono

Ardiantiono is currently working as Biodiversity Science Coordinator for WCS Indonesia Program in Leuser Landscape, while also working on his PhD degree with Durrell Institute of Conservation and Ecology, University of Kent, fully supported by scholarship. He used to work as a Research Associate for Komodo Survival Program and earned his place as one of the scholarship awardees in University of Oxford's Wildlife Conservation Research Unit Postgraduate Diploma Program.

Caroline Dea Tasirin

Caroline Dea Tasirin is a lecturer at the Forestry Program in Sam Ratulangi University, Manado. She is also a co-founder and field coordinator of SULUT Semangat, a YSEALI Seeds for the Future project focused on livening up environmental education in North Sulawesi. She recently graduated from Yale School of Forestry and Environmental Studies with a master's degree in Forest Science, fully supported by the CIFOR-USAID scholarship.

Sheherazade

Sheherazade is now working as Conservation Science Specialist for WCS Indonesia Program. She's also the Co-Founder and Program Manager for PROGRES, or the Sulawesi Regional Ecological Conservation Initiative, and the President of Tambora Muda Indonesia. She recently earned her master's degree in Wildlife Ecology and Conservation from University of Florida fully supported by CIFOR-USAID scholarship.

Irhamna P. Rahmawati

Irhamna P. Rahmawati is now the Advisor for Wildlife Rescue Center in Jogja, after previously working as their Conservation Manager and Animal Health Coordinator. She earned her master's degree in Global Wildlife Health and Conservation, from University of Bristol, as one of the awardees for prestigious Indonesian government scholarship, LPDP.

Per August 2020, each mentoring group have conducted at least two mentoring sessions in March and May 2020, with one group that had already conducted their third meeting in July 2020. We elaborate the mentoring sessions of each group below (all mentors and mentees have agreed that we put the following screenshots for this progress report):

Mentoring Group 1
Mentor: Ardiantiono

Session 1 (March 15, 2020)
Group Introduction and Briefing: introduction from each of the participants, defining group expectations from mentoring sessions, and establishing the coordinator and topic for each session.

Session 2 (May 15, 2020)
Communication and Networking in Conservation Career: presentation from external speaker (Sheherazade) about building a network to support and establish a career in conservation.

Session 3 (July 18, 2020)
Tips for Presenting in an International Conference: Ardiantiono presented about challenges and solutions for presenting scientific research in an international conference.

Mentoring Group 2
Mentor: Caroline Dea Tasirin

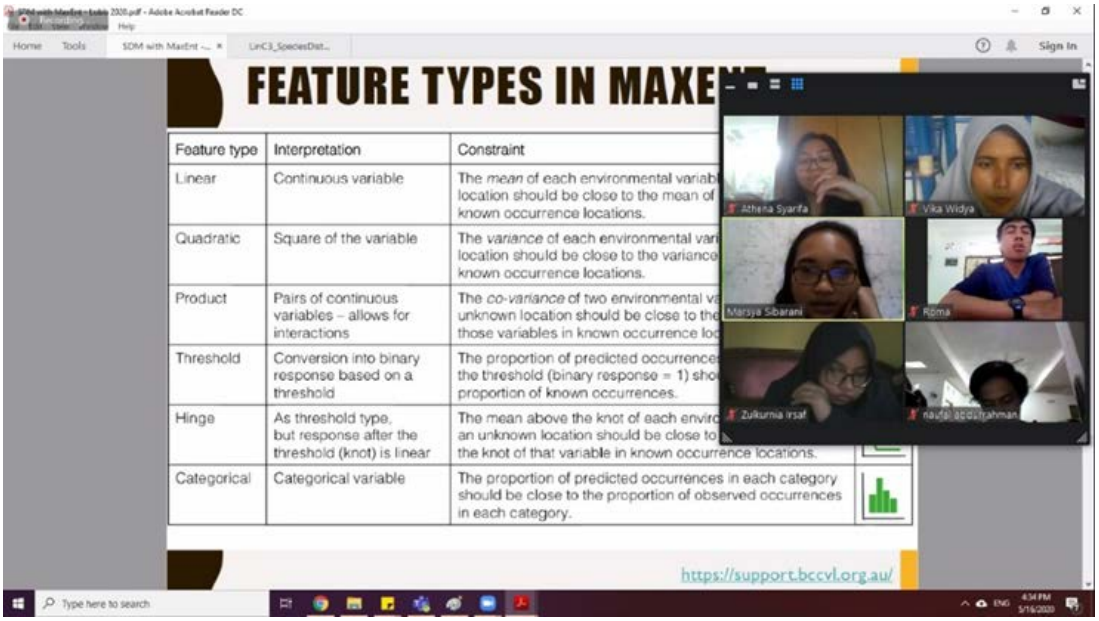
Session 1 (March 6, 2020)
Group Introduction and Briefing: introduction from each participants, highlights and lesson learned from Conservation Camp 2, and possible topics for next mentoring sessions.

Session 2 (May 15, 2020)
Scholarship application: Caroline Dea Tasirin shared about her process in applying for a scholarship and shared several tips and tricks that would be useful for the participants.

Mentoring Group 3
Mentor: Sheherazade

Session 1 (March 8, 2020)
Group Update and Briefing: each mentee provide a brief update of their current activities and explained their expectations from mentoring sessions.

Session 2 (May 16, 2020)
Species Distribution Modelling: an external contributor (Marsya Sibarani) provided a comprehensive training in Species Distribution Modelling techniques and application for wildlife conservation.



Mentoring Group 4
Mentor: Irhamna Putri Rahmawati

Session 1 (May 16, 2020)
Group Introduction and Briefing: introduction from each of the participants and compiling possible topics and training for future mentoring sessions based on their current activities.

Session 2 (June 20, 2020)
Short Training on Popular Scientific Articles: external contributors (Shabrina G. Aninta and Reza Septian) provided a comprehensive training in writing popular scientific articles, and its application in wildlife conservation.

3. Assessment

To assess the effectiveness of Conservation Camp in increasing the participants' knowledge and skill sets, we assigned them pre-camp survey in the first day of the camp and post-camp survey at the end of the camp. This survey consisted of 40 items covering topics discussed during the camp. The participants were asked to score each statement with a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Some examples of the survey items are:

- I know what Indonesian Biodiversity Strategy and Action Plan is.
- I understand the methods to estimate carbon stock.

Mean score pre-camp was 2,55 (SD = 0,70), while mean score post-camp was 4,03 (SD = 0,37) (Fig. X). To analyze the survey, we performed one-tailed Wilcoxon signed-rank test for paired data, and the result showed that post-camp scores were significantly higher than pre-camp scores (V = 152, *p-value* = 0.00019). Therefore, we conclude that Conservation Camp had successfully increased the capacity of the participants in biodiversity conservation.

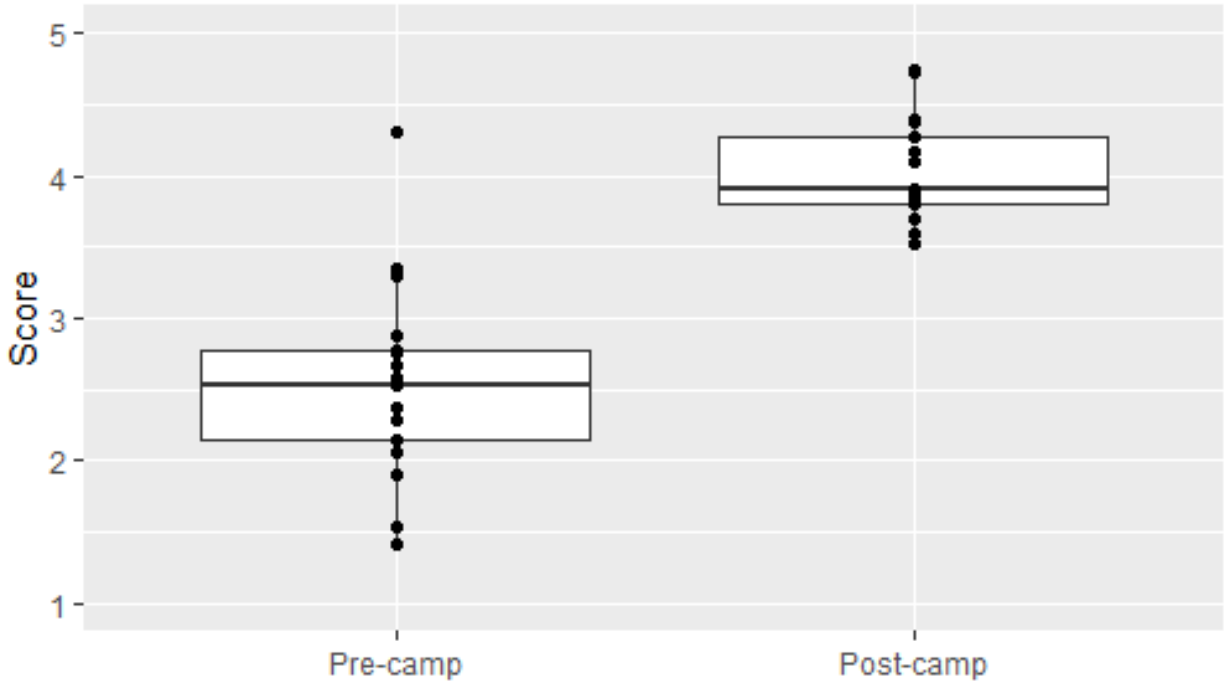


Figure 1. Boxplot showing the scores pre- and post-camp. Each black dot corresponds to one individual participant's score.

Future Plans

- Conducting assessments of skills and knowledge 6 months and 12 months after the camp (August 2020 and February 2021).
- Monitoring of mentoring groups and the continuity of the online meetings.
- Reminding the camp alumni to conduct their own training/seminar/talk session. Due to the pandemic, participants who live in COVID-19 red zones will be required to host online sessions only.