

Hong Kong Firefly Survey Team

2022- 2023

A BRIEF REPORT



Recruitment

2022 JUNE 6 TO JULY 4

Hong Kong Firefly Survey Team
香港螢火蟲調查隊
(Third Recruitment 第三期招募 (2022-2023))

Missions

1. For conservation purpose, conduct persistent and systematic surveys on Hong Kong fireflies;
2. To bring together people involved in firefly conservation and research to exchange knowledge;
3. For advancement and diffusion of knowledge in Hong Kong fireflies.

1-year program & commitments

- 4 lectures (100% attendance)
- 6 practical trainings (>60% attendance)
- 5 additional firefly surveys
- 2 evaluation meetings (50% attendance)

Entry requirements

- 18 years of age or older
- Strong interest on fireflies and conservation
- Macro-photography and videography skills;
- Preferably with education background of zoology, entomology and/or ecology
- Happy to work at night in the wild;
- Able to walk fast and far on trails
- Familiar with trails in Hong Kong
- HKES members have priority

Team Leader
YIU Yiu

When
2022 July to 2023 June

Details
<http://hkentsoc.org/hongkongfireflysurvey>

Join (Deadline July 4, 2022)
<https://form.gle/x6H48tyWfXTncAg5u3>

Target: 5-10 participants

Number of applications received: 15

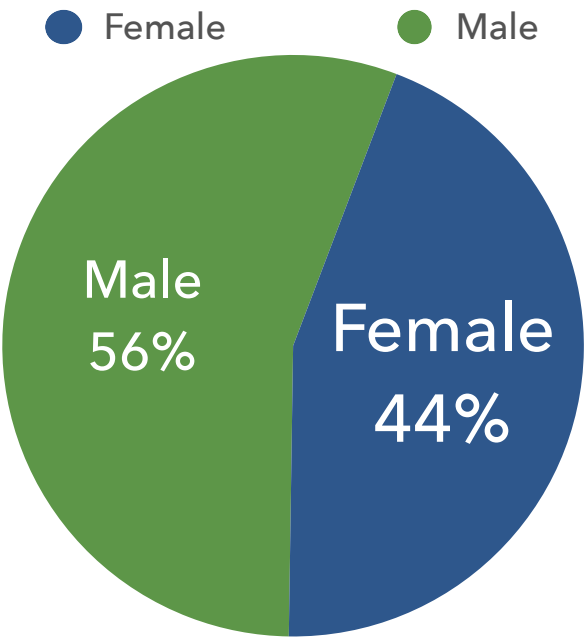
Selection criteria:

- **relevance of Occupation**
- **knowledge and experience on fireflies and conservation**
- **education background**
- **experience and skills of night survey in the wild**
- **macro-photography and videography skills**
- **experience on trails and body fitness**
- **HKES membership**

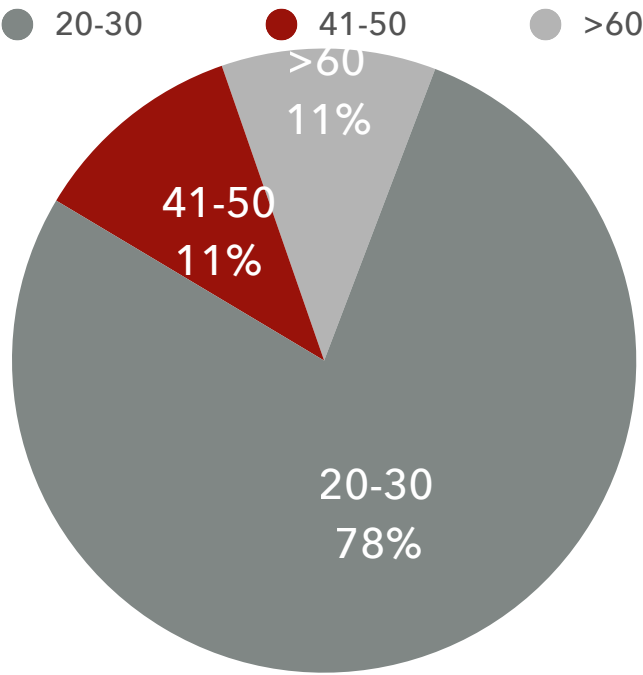
Number of members recruitment: 9 + 3 old members

COMPOSITION OF FIREFLY SURVEY TEAM MEMBERS

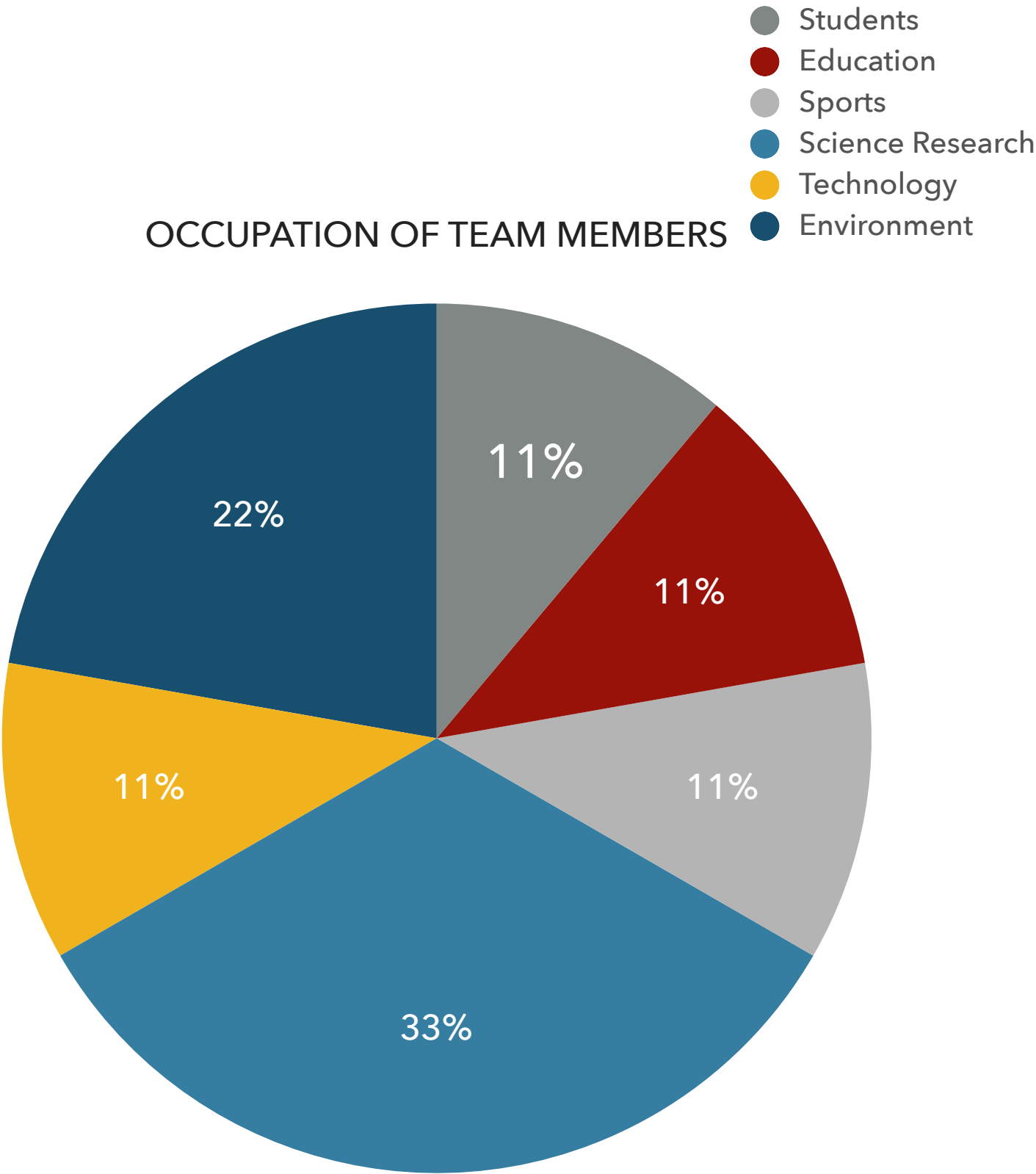
GENDER OF TEAM MEMBERS



AGE OF TEAM MEMBERS



OCCUPATION OF TEAM MEMBERS



LECTURES

Lecture 1 - July 10 2022:

- Introduction to the program
- Introduction to Fireflies
- Firefly morphology
- Firefly life history and seasonality

Lecture 2 - July 13 2022:

- Firefly life history and seasonality (conti.)
- Sex Communication
- Flash Patterns
- Habitats
- Local restrictedness
- Firefly Studies

Lecture 3 - July 20 2021:

- Classification & Nomenclature
- Rhagophthalmidae
- Cyphonocerinae, Ototretinae
- Lampyrinae

Lecture 4 - July 27 2022:

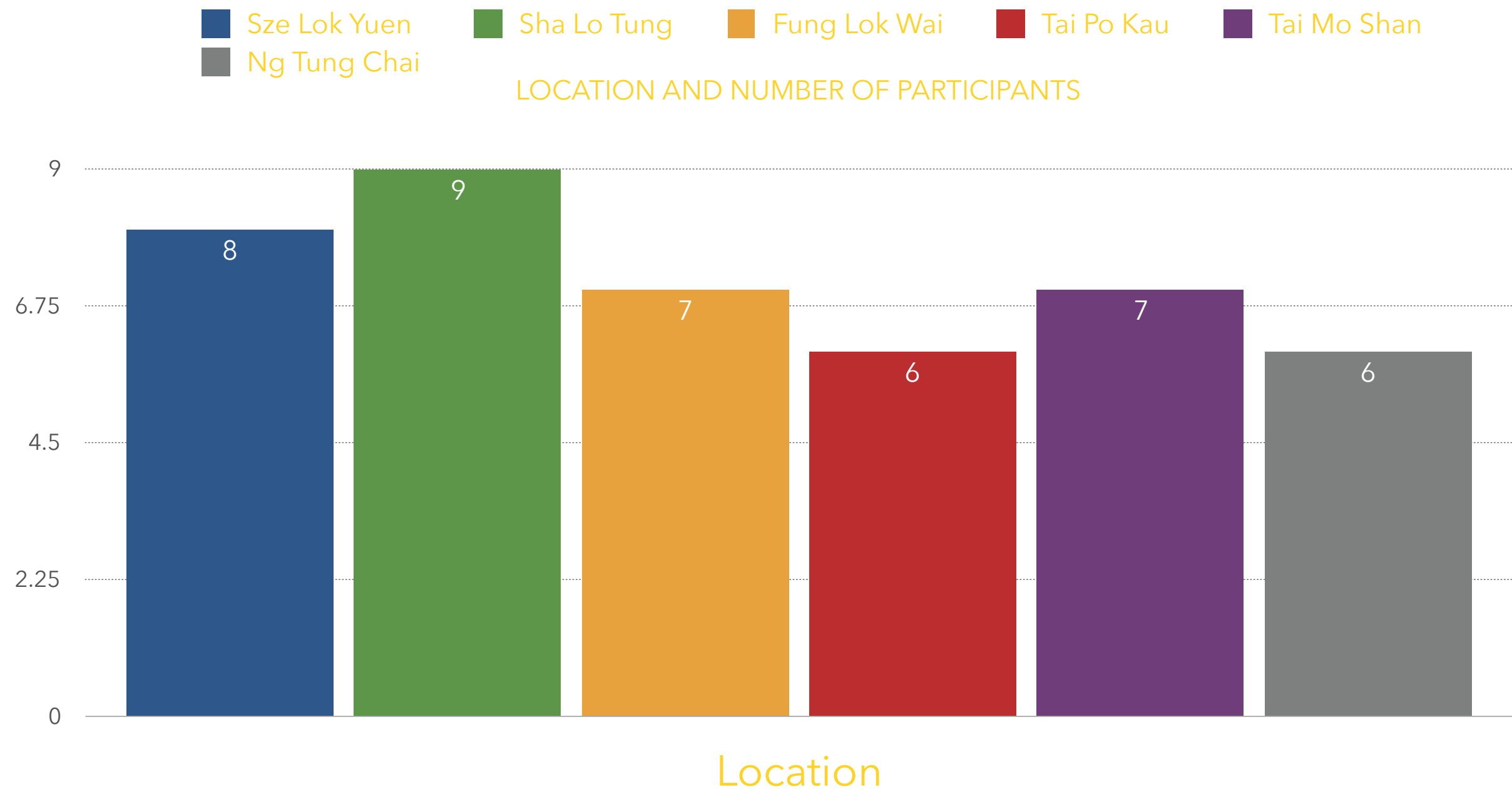
- Luciolinae
- Examination
- Arrangement of practical trainings



Attendance requirement for every lecture: 100% for all trainees

Actual attendance: 100% for all trainees

PRACTICAL TRAININGS - AUGUST TO DECEMBER 2021



Attendance requirement for practical trainings: 4 out of 6 for each trainee

Average number of practical trainings attended per trainee: 4.7

Field Survey Mode P1 - Monitoring population trend of *Rhagophthalmus hiemalis*

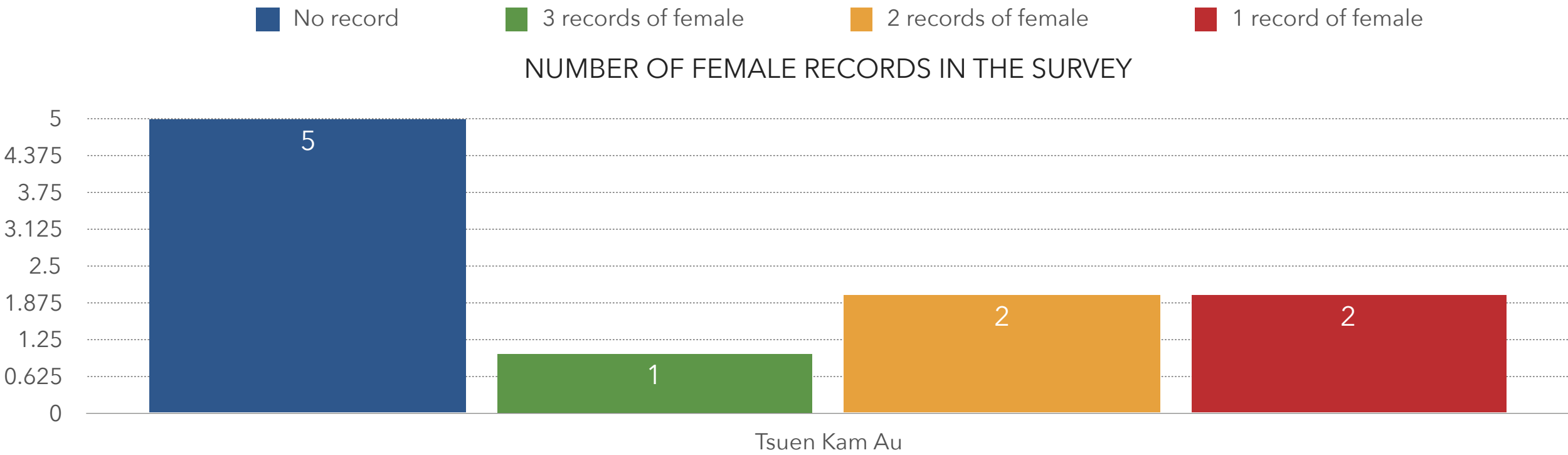
Sites: Tsuen Kam Au

Survey period: December 2022 - February 2023

Number of person participated: 9

Total number of surveys: 10

Results: Out of the 10 surveys, 5 surveys have no record of the target, 2 surveys have 2 records of *Rhagophthalmus hiemalis* female adult in each; 2 surveys have 1 record of *Rhagophthalmus hiemalis* female adult in each ; 1 surveys have 3 record of *Rhagophthalmus hiemalis* female adult in each. In the survey done in Dec 2021 to Feb 2022, out of the 15 surveys, 12 surveys have no record of *Rhagophthalmus hiemalis* female adult. The occurrence rate is increased.



Survey Mode R4 - Range of *Cyphonocerus longicornus*

Sites: Similar habitats near Mount Paker, type locality of this species.

Survey period: April, 2023

Number of person participated: 3

Total number of surveys: 4

Results: The target species is not recorded in all surveys.

Firefly Survey in Lamma Island

Sites: Along the path between Tung Sh Wan and Sok Kwu Wan.

Survey period: May to Early June, 2023

Number of person participated: 4

Total number of surveys: 3

Results: A likely female *Rhagophthalmus* sp. was recorded on May 12



Photo by JessK ch

Survey Mode R3 - Range of *Luciola tuberculata*

Sites: Similar habitats near type locality of this species.

Survey period: April, 2023

Number of person participated: 3

Total number of surveys: 1

Results: The target species is not recorded in outside its known distribution range.

Field Survey Mode P3 - Monitoring population trend of *Luciola tuberculata*

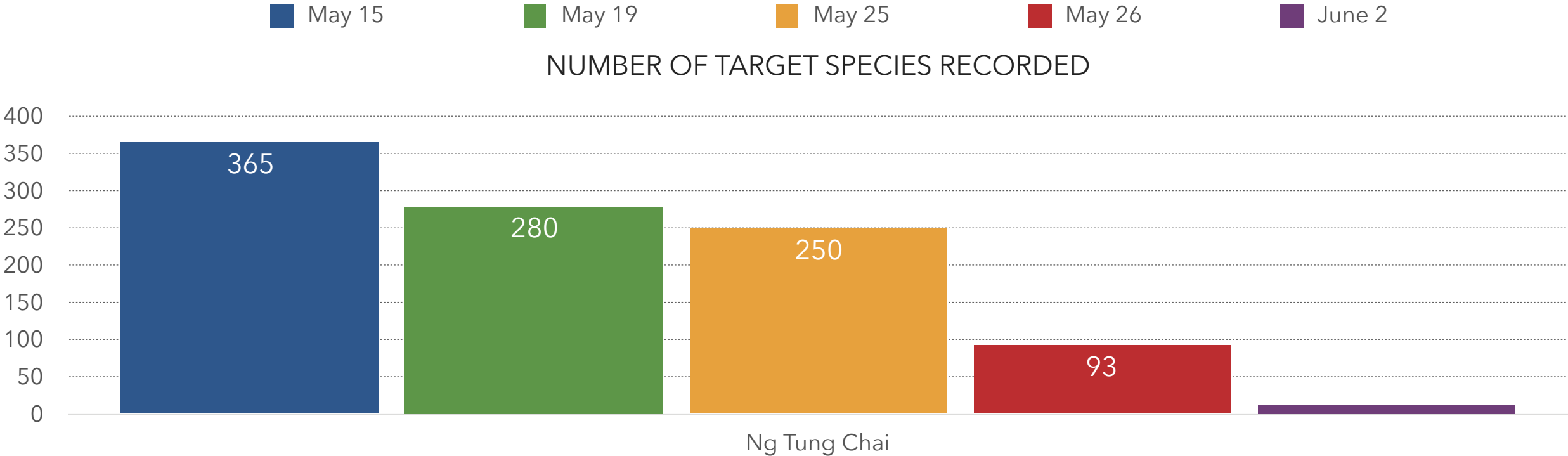
Sites: Ng Tung Chai

Survey period: Late May to early June 2023

Number of person participated: 4

Total number of surveys: 4

Results: Survey on May 15 recorded 365 individuals; Survey on May 19 recorded 280; survey on May 26 recorded 93, survey on June 2 recorded 13.



Other findings
