

Hong Kong Firefly Survey Team

2024- 2025 A BRIEF REPORT



Recruitment

2024 JULY 6 TO AUGUST 1

Hong Kong Firefly Survey Team
香港螢火蟲調查隊
5th Recruitment 第五期招募 (2024-2025)

**LEARN TO SURVEY
SURVEY TO PROTECT**

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
- Enjoy working at night in the wild;
- Able to walk fast and far on trails
- Familiar with trails in Hong Kong
- HKES members have priority

When

2023 August to 2024 June

Details

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

Team Leader

YIU Vor

- Hon. Treasurer, Fireflyers International Network
- Red List Authority Coordinator, IUCN SSC Firefly Specialist Group

Join (Deadline August 1, 2024)

<https://forms.gle/ZZ2GMGrCBzdddqUo8>

Target: 5-10 participants

Number of applications received: 21

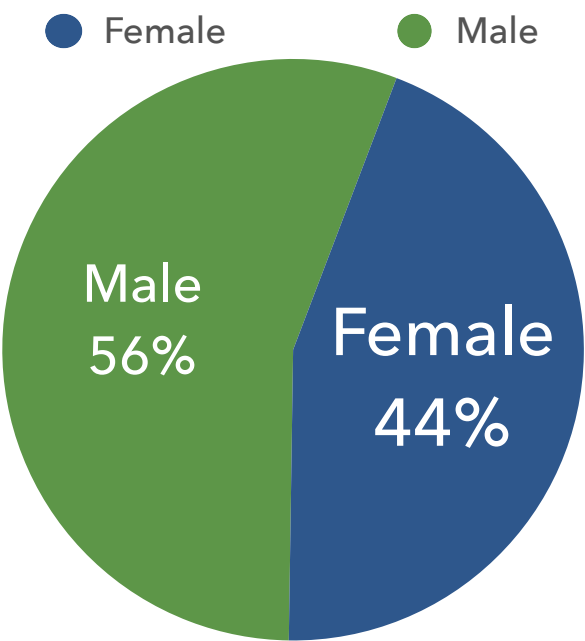
Selection criteria:

- **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**

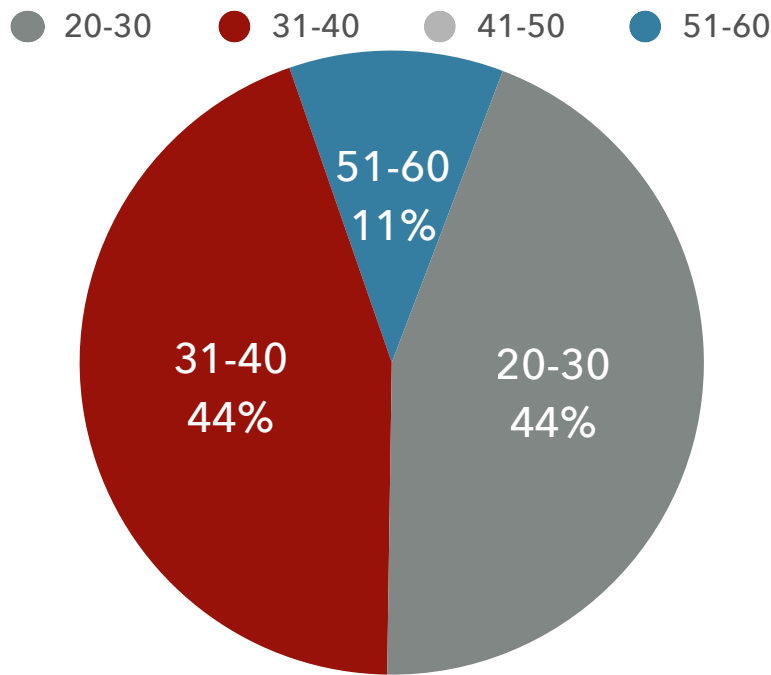
Number of members recruitment: 18

COMPOSITION OF FIREFLY SURVEY TEAM MEMBERS

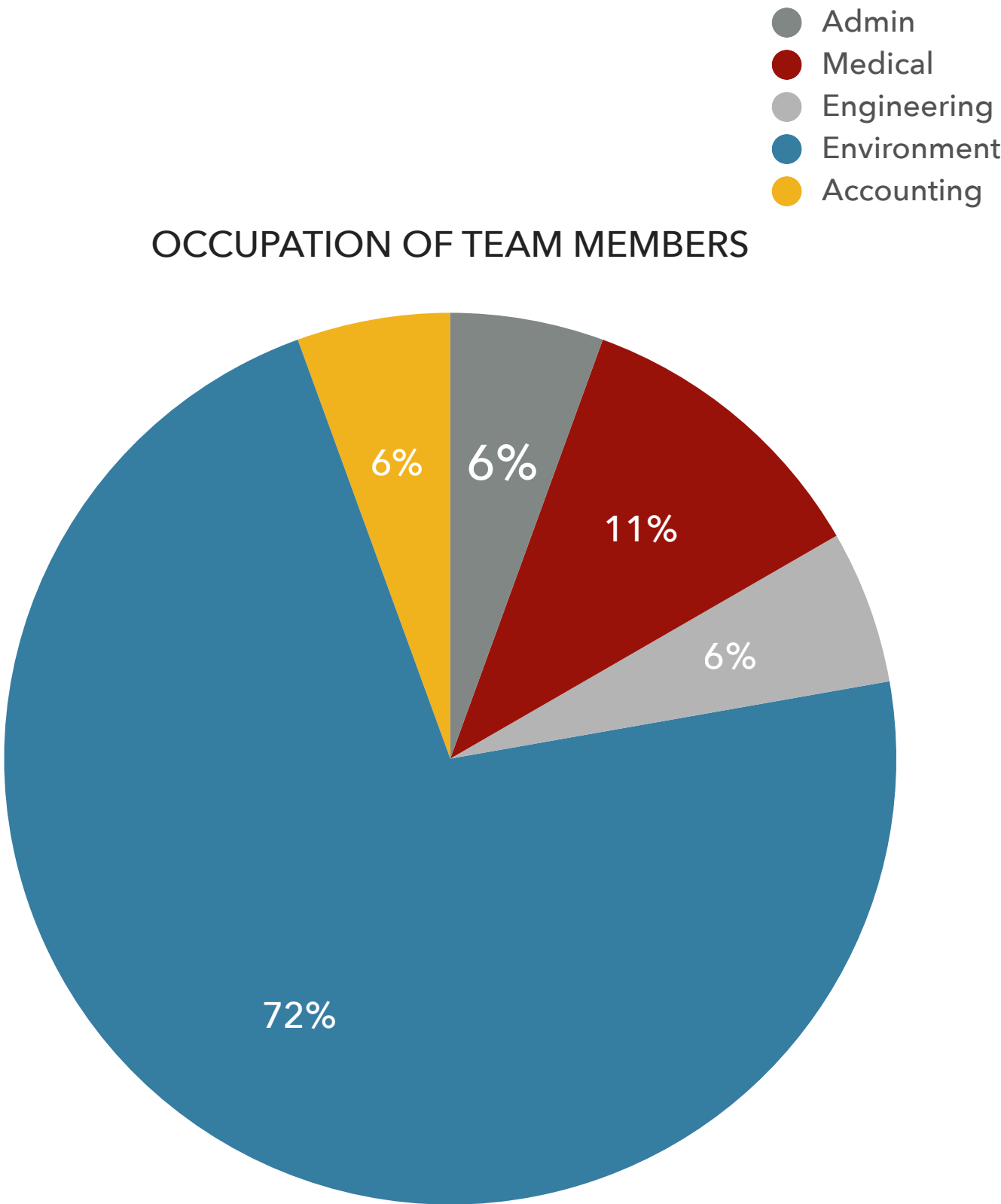
GENDER OF TEAM MEMBERS



AGE OF TEAM MEMBERS



OCCUPATION OF TEAM MEMBERS



LECTURES

Lecture 1 - August 8, 2024:

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

Lecture 2 - August 16, 2024:

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

Lecture 3 - August 22, 2024:

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

Lecture 4 - August 29, 2024:

- Luciolinae
- Examination
- Arrangement of practical trainings



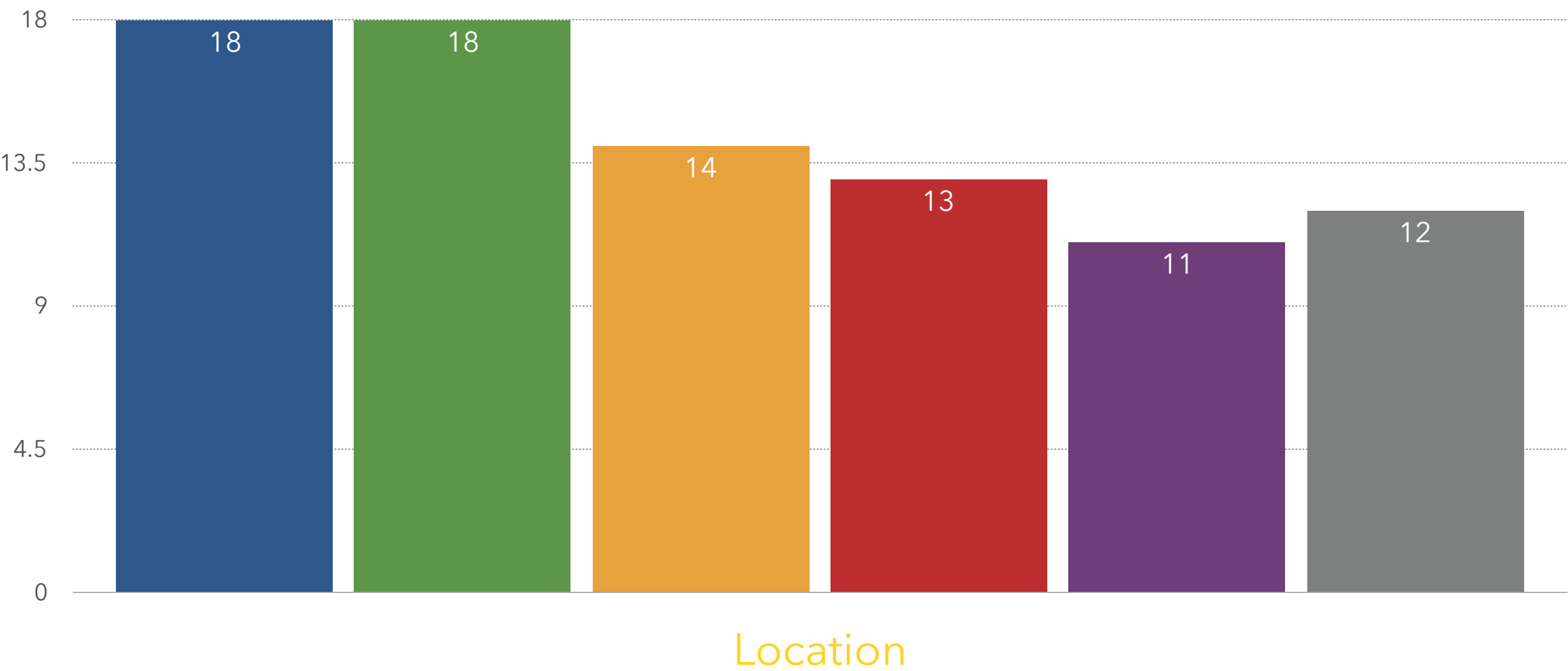
Attendance requirement for every lecture: 100% for all trainees

Actual attendance: 94% for all trainees

PRACTICAL TRAININGS - AUGUST TO DECEMBER 2023



LOCATION AND NUMBER OF PARTICIPANTS



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

Average number of practical trainings attended per trainee: 4.8

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

IUCN Red List Category: Critically Endangered

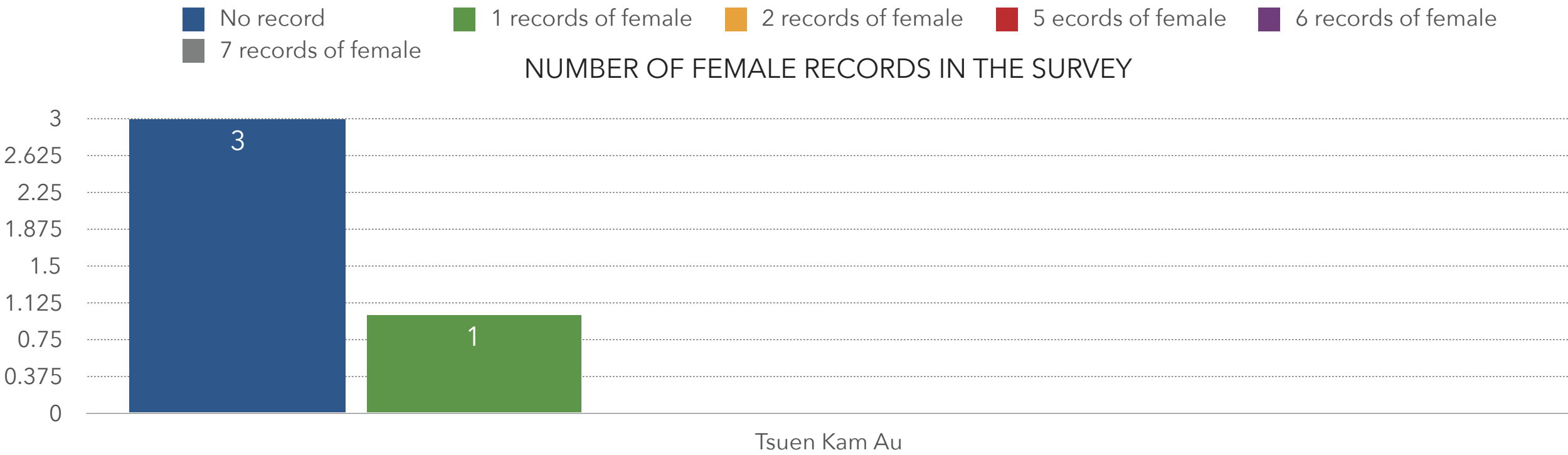
Sites: Tsuen Kam Au

Survey period: December 2024 - February 2025

Number of person participated: 6

Total number of surveys: 4

Results: Out of the 4 surveys, 3 surveys have no record of the target, 1 surveys have 1 record of *Rhagophthalmus hiemalis* female adult.



Survey Mode S1 - Spatial distribution of *Rhagophthalmus hiemalis*

IUCN Red List Category: Critically Endangered

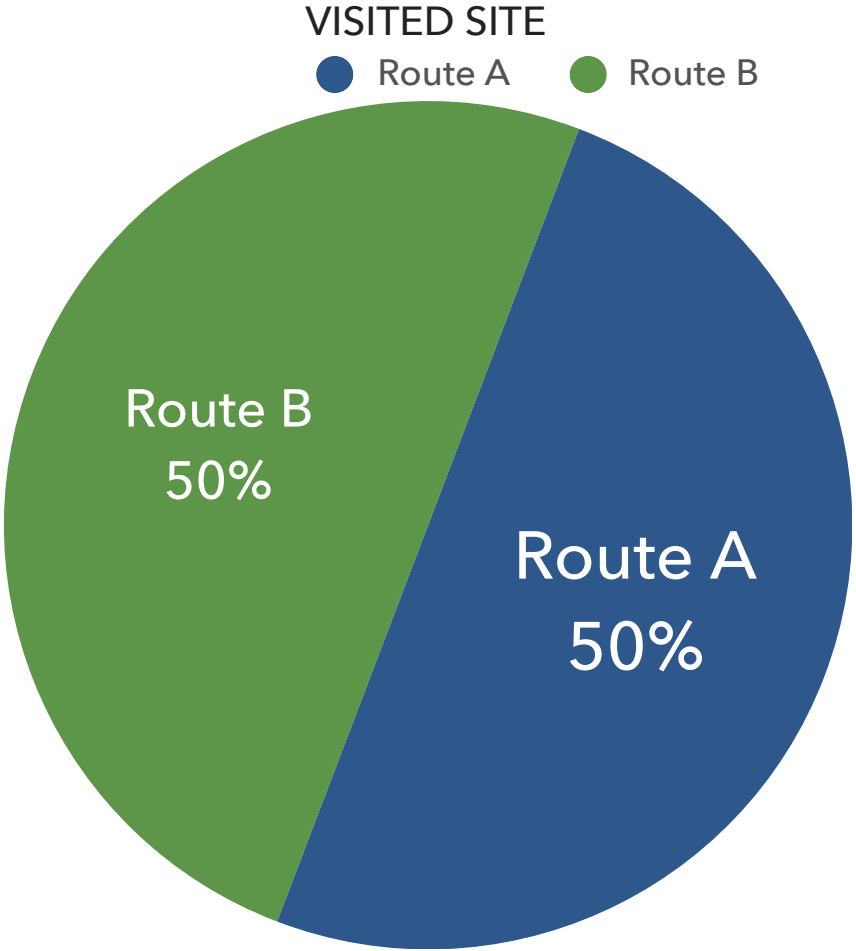
Sites: Similar habitats in Shing Mun Country Park.

Survey period: December 2024 - February 2025

Number of person participated: 7

Total number of surveys: 6

Results: A female target species was recorded on January 5, 2025 in Route B, a new occurrence site in Hong kong. A mating pair of target species was recorded on January 19, 2025 in Route A, a new occurrence site in Hong kong.



Field Survey Mode P2 - Monitoring population trend of *Oculogryphus chenghoiyanae*

IUCN Red List Category: Critically Endangered

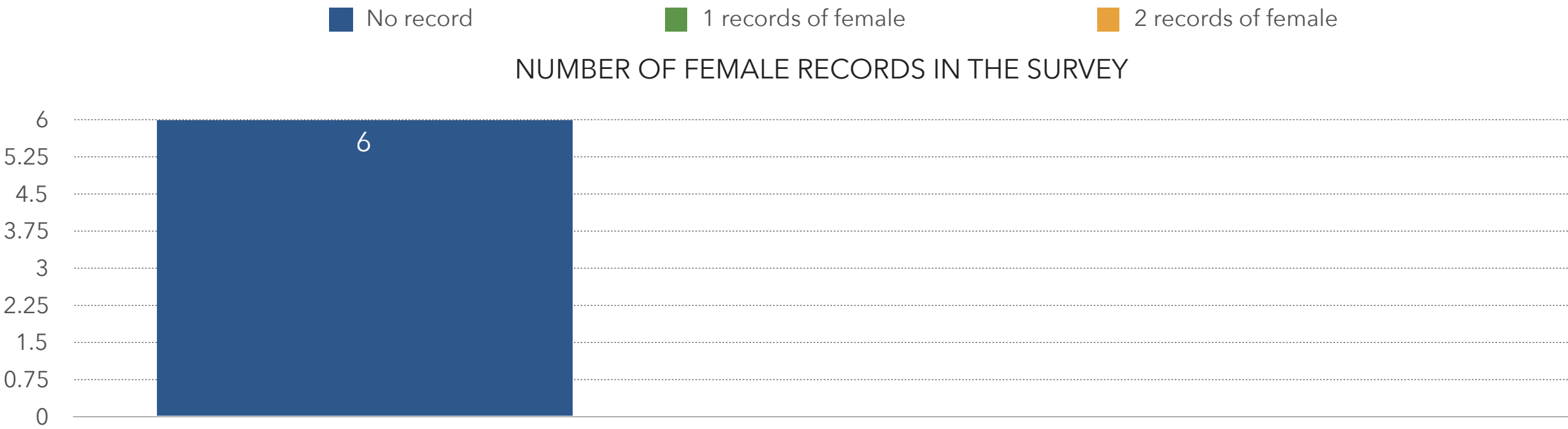
Sites: Tei Tong Tsai

Survey period: May to June 2025

Number of person participated: 5

Total number of surveys: 6

Results: The taget was not recorded in all of the surveys. Average number of records was 0.5 per visit in 2024. The average number of records in 2023 was 1.2 per visit. The occurrence rate is decreased.



Survey Mode S2 - Spatial distribution of *Oculogryphus chenghoiyanae*

IUCN Red List Category: Critically Endangered

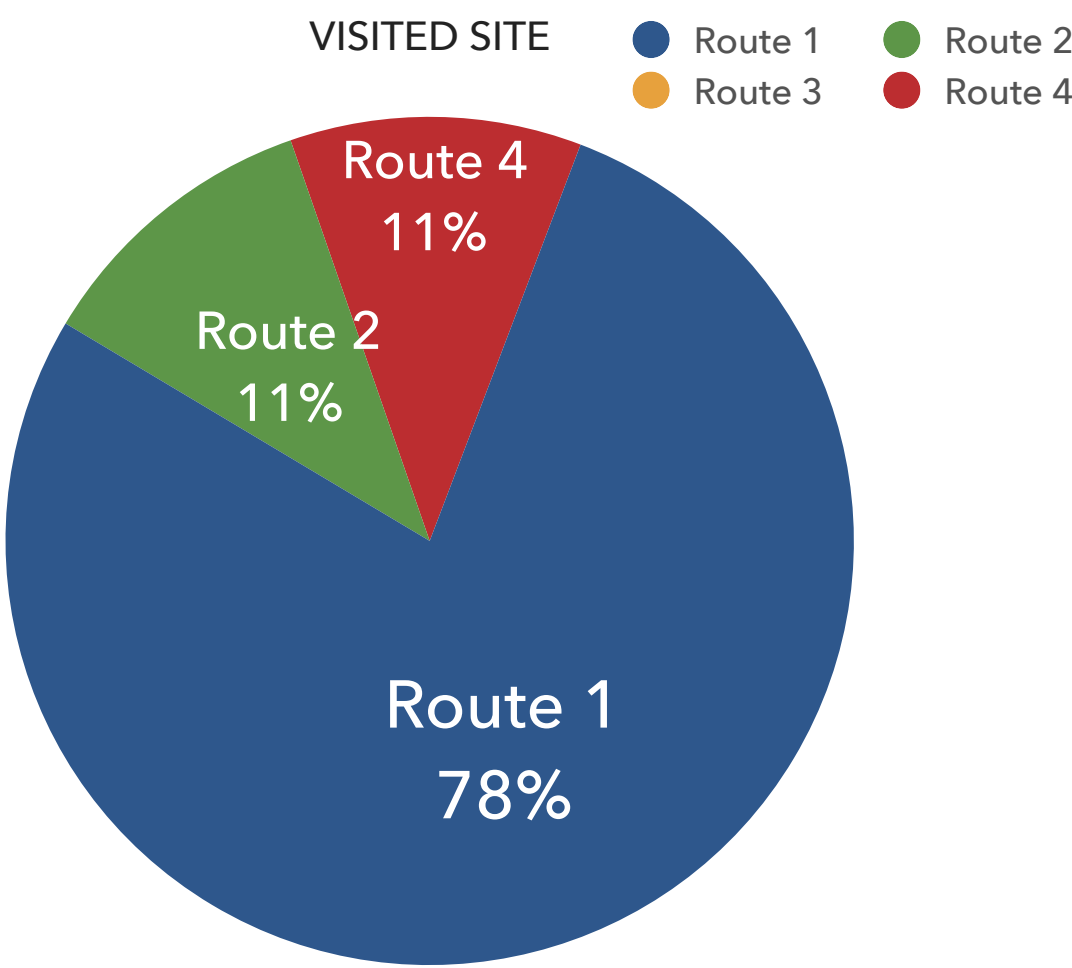
Sites: Similar habitats in Lantau Island, near the occurrence site

Survey period: May - June 2025

Number of person participated: 11

Total number of surveys: 10

Results: No record was found in all of the surveys.



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

IUCN Red List Category: Critically Endangered

Sites: Ng Tung Chai

Survey period: Late May to early June 2025

Number of person participated: 9

Total number of surveys: 8

Results: Average Number of records varies greatly across the survey period. Average number of records is 106.6 per visit. The average number of records in 2024 was 62.7 per visit, in 2023 was 247 per visit.

