

Jeffery C.F. Chan

Curriculum vitae

[Personal website](#) | [Freshwater Collective](#) | [Google Scholar](#) | [Research Gate](#) | Email address: jefferychan@connect.hku.hk

Education

- Since 2022 **PhD**, Freshwater Ecology, [The University of Hong Kong](#), Hong Kong
Thesis: The ecology and conservation of diadromous animals with a special reference to dams
Supervisors: David Dudgeon, Jia Huan Liew
- 2020-2021 **MRes**, Tropical Forest Ecology, [Imperial College London](#), United Kingdom
Thesis (Distinction): Multiple stressors on freshwater ecosystem functioning: biocides and warming
Supervisor: Guy Woodward
- 2015-2019 **BSc**, Environmental Science, [The University of Hong Kong](#), Hong Kong
Thesis (Distinction): A review on mitigation measures of streams and rivers in past Environmental Impact Assessment projects of Hong Kong
Supervisor: Billy C.H. Hau

Work experience

- Since 2019 **Founder**, [Freshwater Collective](#), Hong Kong - *conservation organization* www.freshwatercollective.org
- 2025 **Visiting Researcher**, [Lee Kong Chian Natural History Museum](#) & [National University of Singapore](#), Singapore – *morphometric and genomic analyses of freshwater fishes; invited talks*
- 2022–2025 **Research Associate**, [Lingnan University](#), Hong Kong – *managing fish ladder experiment and fieldwork*
- 2021 **Technical Assistant**, [The University of Hong Kong](#), Hong Kong – *mapping non-native freshwater fishes*
- 2020-2021 **Research Associate**, [Imperial College London](#), United Kingdom – *assessing green corridor biodiversity*
- 2018-2020 **Assistant Ecologist**, [aec Ltd. \(now Aurecon Group\)](#), Hong Kong – *environmental impact assessments*

Funding awarded

- 2026-2028 **Lantau Conservation Fund**: Ecology and conservation of freshwater eels in Lantau (**HKD \$1.5million, USD convert ~\$192,000**) (co-developed idea and co-wrote proposal, Anthony Lau as official PI)
- 2022-2025 **Lantau Conservation Fund**: A comprehensive survey of the diadromous animals of Lantau: assessment of distribution, population status, and conservation strategies (**HKD \$1.7million, USD convert ~\$230,300**) (co-developed idea and lead in writing proposal and managing funds, Jia Huan Liew as official PI)
- 2022-2025 **The University of Hong Kong Postgraduate Scholarship**: Diadromous species of Hong Kong: population status, threats, conservation strategies (**HKD \$912,000, USD convert ~\$116,000**)
- 2024 **The University of Hong Kong Research Services**: Conference Fund for Research Postgraduate Students (**HKD \$13,500, USD convert ~\$1,700**)
- 2021 **Outdoor Wildlife Learning Hong Kong**: App development fund (**HKD \$3000, USD convert ~\$380**)

Teaching

National University of Singapore

LSM4264 – **Freshwater Biology** (guest lecture, 2025)

The University of Hong Kong

Outstanding Demonstrator Award: 2023-2024, 2024-2025

BIOL 2306 – **Ecology and evolution** (demonstrator, 2022, 2023, 2024)

BIOL 2102 – **Biostatistics** (demonstrator, 2023, 2024)

BIOL 1309 – **Evolutionary diversity** (demonstrator, 2023)

Lingnan University

MScESGM - Master of Science in **Environmental, Social, and Governance Management** (demonstrator, 2025)

CLD 9017 - **Ecology: The Science of Environmental Issues** (demonstrator, 2022, 2023)

CLA 9026 - **Nature Appreciation through Arts and Creative Media** (guest lecture, 2022)

Mentoring/advising

2024-2025	Chiu Yui Hong, MSc, <u>The University of Hong Kong</u> , Hong Kong
2023-2024	Samuel C.L. Ho, Research Assistantship, <u>Lingnan University</u> , Hong Kong
2022-2024	Billy Y.K. Lam, Research Assistantship, <u>Lingnan University</u> , Hong Kong
2022-2024	Yau Sze-Man, MPhil, <u>Lingnan University</u> , Hong Kong
2022-2023	Alex H.B. Liu, Research Assistantship, <u>Lingnan University</u> , Hong Kong

Publications & manuscripts

Published papers (*corresponding author)

1. **Chan, J.C.F.**, Lam, B.Y.K., Dudgeon, D. & Liew*, J.H. (2025). Global consequences of dam-induced river fragmentation on diadromous migrants: a systematic review and meta-analysis. *Biological Reviews*. [\[Link\]](#) [\[PDF\]](#)
2. **Chan, J.C.F.**, Liew, J.H. & Dudgeon*, D. (2025). Small dams fragment assemblages of diadromous and freshwater decapods in Hong Kong lowland streams. *Hydrobiologia*, 852, 2871–2886. [\[Link\]](#) [\[PDF\]](#)
3. **Chan***, **J.C.F.**, Liew, J.H. & Dudgeon, D. (2024). High spatial variability in a species-rich assemblage of diadromous fishes in Hong Kong, southern China. *Journal of Fish Biology*, 105(3), 663–681. [\[Link\]](#) [\[PDF\]](#)
4. Chow, L.H., **Chan, J.C.F.** & Tsang*, L.M. (2024). *Caridina ngankeeae* sp. nov., a new species of freshwater shrimp (Decapoda: Caridea: Atyidae) from Hong Kong. *Zootaxa*, 5476(1), 44–50. [\[Link\]](#) [\[PDF\]](#)
5. **Chan***, **J.C.F.**, Tsang, A.H.F., Yau, S.-m., Hui, T.C.H., Lau, A., Tan, H.H., Low, B.W., Dudgeon, D & Liew J.H. (2023). The non-native freshwater fishes of Hong Kong: diversity, distributions, and origins. *Raffles Bulletin of Zoology*, 71, 128–168. [\[PDF\]](#)

6. Chow, L.H., **Chan, J.C.F.** & Tsang*, L.M. (2022). A synopsis of *Macrobrachium* Spence Bate, 1868 (Decapoda: Caridea: Palaemonidae) from Hong Kong, with description of a new species. ***Journal of Crustacean Biology***, 42(3), ruac039. [\[Link\]](#) [\[PDF\]](#)

In preparation/review/revision (*corresponding author, #Graduate student advisee)

7. Ho**, S.C.L., **Chan, J.C.F.**, Lee, W.H., Sung, Y.H. & Liew*, J.H. Highlighting the species diversity, pricing trends, and conservation concerns in a major ornamental fish hub. In revision at ***Oryx***. [\[Preprint\]](#)
8. **Chan***, **J.C.F.**, Low, B.W., Tan, H.H. & Liew*, J.H. Species boundaries of the predaceous chub *Parazacco spilurus* (Xenocyprididae) and the description of a new cryptic species from southern China. In review at ***Vertebrate Zoology***. [\[Unpublished manuscript\]](#)
9. Chow, L.H., **Chan, J.C.F.** & Tsang*, L.M. Three new cryptic species of the genus *Caridina* (Decapoda:Caridea: Atyidae) from Hong Kong, with notes on the *C. serrata* species group. In review at ***Zoological Studies***. [\[Unpublished manuscript\]](#)
10. **Chan***, **J.C.F.**, Low, B.W., Lau, A., Rheindt, F.E., Dudgeon, D. & Liew*, J.H. Dams have a rapid impact on genetic structuring but not diversity of landlocked amphidromous goby fish populations. In review at ***Journal of Applied Ecology***.
11. **Chan***, **J.C.F.**, Tsang, A.H.F., Lau, A. & Lam*, V.W.Y. From village to metropolis: reconstructing freshwater fisheries amid urban growth. In prep for invited submission to ***Reviews in Fish Biology & Fisheries***.
12. **Chan***, **J.C.F.**, Lin, B.A., Ying, C., Liew, J.H. & Dudgeon, D. A century of population declines and genetic attrition of a commercial migratory fish (*Plecoglossus altivelis altivelis*: Plecoglossidae) across China. In prep.
13. Yau**, S.-m., **Chan, J.C.F.** & Lau*, A. Homogenization of freshwater fish assemblages in impounded reservoirs inferred by eDNA metabarcoding. In prep.
14. Lam**, B.Y.K., **Chan, J.C.F.** & Liew*, J.H. A novel structural enhancement improves the passage efficiency of diadromous decapods and fish on an artificial ramp. In prep.

Technical reports

1. Or, C.K.M. & Chan, B.P.L. (Eds.). (2025). The State of Hong Kong Biodiversity 2025. WWF-Hong Kong. [\[Link\]](#) [\[PDF\]](#)
2. WWF-Hong Kong. (2025). Hong Kong Terrestrial Biodiversity Hotspot Map. [\[Link\]](#) [\[PDF\]](#)
3. Hong Kong Biodiversity Expert Group. (2024). Recommendations to the Hong Kong SAR Government for the Biodiversity Strategy and Action Plan (BSAP) 2025–2035. ADM Capital Foundation, Hong Kong. [\[Link\]](#) [\[PDF\]](#)

Mobile applications

1. Freshwater Collective. (2021). Pocket Guide to the Freshwater Species of Hong Kong. [\[Apple Store\]](#) [\[SCMP press release\]](#) [\[HKFP press release\]](#)

Talks presented

1. Ho[#], S.C.L., **Chan, J.C.F.**, Lee, W.H., Sung, Y.H., Liew, J.H. (2025) Highlighting the species diversity, pricing trends, and conservation concerns in a major ornamental fish hub. In: **International Congress for Conservation Biology 2025**, Australia.
2. **Chan, J.C.F.**, Liew, J.H., Dudgeon, D. (2025) The impacts of fragmentation by dams on a species-rich diadromous fish assemblage in Hong Kong, southern China. In: **Joint conference of the Asian Society of Ichthyologists Annual Meeting and the 12th Indo-Pacific Fish Conference**, Taiwan.
3. **Chan, J.C.F.**, Lam, B.Y.K., Liew, J.H., Dudgeon, D. (2025) The impact of dams on migratory fishes and decapods: global and local perspectives. In: **Invited seminar, National University of Singapore**, Singapore.
4. **Chan, J.C.F.**, Liew, J.H., Dudgeon, D. (2024) Influence of barriers on diadromous fish assemblages in tropical Hong Kong. In: **155th Annual Meeting of the American Fisheries Society**, Hawaii.
5. Lam[#], B.Y.K., **Chan, J.C.F.**, Liew, J.H. (2024) A novel structural enhancement improves the passage efficiency of diadromous decapods and fish on an artificial ramp. In: **Invited seminar, Max Planck Institute for Neurobiology of behaviour-caesar**.
6. Yau[#], S.-M., **Chan, J.C.F.**, Lau, A. (2023) Determining distribution and occupancy of introduced crayfish and freshwater fish in Hong Kong reservoirs and streams. In: The 10th EAFES international congress, Korea.
7. **Chan, J.C.F.**, Liew, J.H., Dudgeon, D. (2023) The influence of in-stream barriers on a species rich diadromous fish assemblage in Hong Kong. In: **The 3rd Ecology & Biodiversity Research Symposium**, Hong Kong

Working groups and service

Since 2024	Peer reviewer, Journal of Fish Biology (2024,2025), Biological Invasions (2025)
2024-2025	Hong Kong Biodiversity Expert Group , Recommendations to the Hong Kong SAR Government for the Biodiversity Strategy and Action Plan (BSAP) 2025–2035, ADM Capital Foundation
2023-2025	Lead Assessor of freshwater fishes and crustaceans , The State of Hong Kong Biodiversity 2025, WWF Hong Kong
2020-2021	Founding President , ICL Society for Freshwater Science, Imperial College London

Outreach

Since 2020	Short documentaries and spotlight videos of freshwater biodiversity, Freshwater Collective (>35,000 views) https://www.youtube.com/@FreshwaterCollective/videos
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- 2025 Common diadromous species of Hong Kong database, **Freshwater Collective**
<https://www.freshwatercollective.org/species-database>
- 2024 Diadromous species of Lantau eco-tour, **Lingnan University**
- 2021 Pocket Guide to Freshwater Species of Hong Kong mobile app, **Freshwater Collective**
<https://apps.apple.com/is/app/freshwater-species-hong-kong/id1540616520>
- 2020 Hong Kong Freshwater Stream Ecology Course, **Outdoor Wildlife Learning Hong Kong**
<https://www.owlhk.org/en/ecology-training/freshwater-stream-ecology-course/0250001/Hong+Kong+Freshwater+Stream+Ecology+Course>
- 2018 Take Action! 2018 Youth Biodiversity Conservation Leadership Training Scheme, **The University of Hong Kong** <https://takeactionhk.wixsite.com/hku-ke/schedule-of-events>