MUHAMMAD ILYAS

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Conservationist to be, interested in finding answers to questions of conservation relevance on vertebrates by combining varying field and modelling approaches.

Education

Master of Science in Applied Data Science	09/2022-

Focus: Ecology and Evolution

UNIVERSITY OF EXTER

Master of Philosophy in Zoology	09/2017-02/2020

Focus: Wildlife Ecology

QUAID-I-AZAM UNIVERSITY ISLAMABAD, PAKISTAN

Thesis: Abundance Estimation of Himalayan Lynx Through Multiple Modelling Approach

Supervisor: Muhammad Ali Nawaz, Associate Professor

Bachelor of Science, Zoology	09/2013-07/2017

ISLAMIA COLLEGE PESHAWAR, PAKISTAN

Thesis: Molecular Prevalence of HBV in District Bannu, Khyber Pakhtunkhwa Pakistan

Supervisor: Muhammad Zahid, Associate Professor

Research Experience

Research Associate	04/2021-06/2021

SNOW LEOPARD FOUNDATION ISLAMABAD PAKISTAN

- Survey design and implementation
- Management and analysis of field data
- Communication of findings and results with donor agencies

Research Assistant	09/2017-02/2020

CARNIVORE CONSERVATION LAB, DEPARTMENT OF ZOOLOGY, QUAID-I-AZAM UNIVERSITY ISLAMABAD PAKISTAN

Advisor: Muhammad Ali Nawaz, Associate Professor

- Management and organization of field data
- Report writing

Camera Trap Survey for Mammalian Diversity Assessment CHITRAL GOL NATIONAL PARK	06/2019-08/2019
Camera Trapping and Genetic Sampling of Carnivores and prey species ASTORE VALLEY GILGIT-BALTISTAN	11/2018-04/2019

Publications

Younis, M., Ullah, S., Bari, F., Asif, M., **Ilyas, M**., Rauf, M., Rehman, E. U., Noor, R., Arif, M., & Nawaz, M. A. (*2022*). Relative Abundance of Mammalian Fauna of Chitral Gol National Park, Pakistan. *Pakistan J. Zool., 55: 289-297*.

Awards

Green Futures Postgraduate Scholarship	2022

UNIVERSITY OF EXETER
£38,000/-

Workshops, Summer Schools, Conferences and Seminars

Quantitative Methods for Population Dynamics	21-22/03/2022
A TWO-DAY ONLINE WORKSHOP WITH R	
Data Science Summer School	09/07/2021-30/07/2021
ONLINE SUMMER SCHOOL	Hertie School Data Science Lab, Berlin
Fourth International Conference on Biosciences (ICBS-2021)	15/06/2021
DEPARTMENT OF PLANT SCIENCES QUAID-I-AZAM UNIVERSITY ISLAMABAD PAKISTAN	
Geo-Python 2021	21/04/2021-22/04/2021
ONLINE CONFERENCE	
Arthropod Genomics Symposium	21/07/2020-22/07/2020
ONLINE CONFERENCE	
Virtual International Statistical Ecology Conference	22/06/2020 - 27/06/2020
ONLINE CONFERENCE	University of Sydney
Design Survey and Analysis of Wildlife Populations	01/07/2019 - 12/07/2019
TRAINING WORKSHOP	Snow Leopard Foundation, Pakistan

- Statistical Analysis using R programming
- Collection and analysis of non-invasive genetic samples for wildlife monitoring
- Wildlife capture, im-mobilization, and radio-tracking
- Spatial Capture-Recapture
- Camera-Trap data management
- Double-Observer surveys for Ungulate population estimation
- Occupancy modelling

Museum of Natural History, Ministry of Climate Change

Genetic Analysis of Pakistani Population	18/05/2017
SEMINAR	Centre for OMIC Studies Islamia College Peshawar

Skills

Field: Camera Trapping, Non-invasive genetic sampling, Sign surveys of animals, Double observer surveys for ungulates

Modelling: Abundance and density (Spatial-Capture-Recapture, Unmarked), Occupancy, Habitat Suitability

Computer: *MS Office* (Word, Power Point, Excel), *Mapping and GIS* (ArcGIS, QGIS), *Camera Trap Data Management* (CPW_PhotoWareHouse, CAMELOT, camtrapR, DigiKam) GIMP (GNU Image Manipulation Program), *Programming* (R, Python), *Reference Management* (Mendeley, Zotero), Software and Hardware Installation and Troubleshooting

Languages: Pashto (Native), Urdu (National), English (Language of instruction for higher education, Duolingo English Test Overall Score = 125)

Online Courses

Biological Diversity (Theories, Measures and Data sampling techniques), Ecology: Ecosystem Dynamics and Conservation, Bugs-101: Insect-Human Interactions, The Data Scientist's Toolbox, Probability and Statistics: To p or not to p?	Coursera
Bacterial Genomes: From DNA to Protein Function Using Bioinformatics	Futurelearn.com
DNA Amplification for forensic analysts	National Institute of Justice, US Department of Justice
Going Places with Spatial Analysis, Spatial Data Science: The New Frontier in Analytics	Esri Training
Integrated Planning for Climate Change and Biodiversity	United Nations Institute for Training and Research

Referees

Dr. Stuart Townley, PROFESSOR IN APPLIED MATHEMATICS

ENVIRONMENT AND SUSTAINABILITY INSTITUTE,
UNIVERSITY OF EXETER, PENRYN CAMPUS, ENGLAND

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Dr. Muhammad Ali Nawaz, ASSOCIATE PROFESSOR

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COLLEGE OF ARTS AND SCIENCES, QATAR UNIVERSITY DOHA, QATAR

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