Master's Degree
Wildlife Management

tech global university

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Master's Degree
Wildlife Management

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Global University**
- Credits: **60 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/veterinary-medicine/master-degree/master-wildlife-management**

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01

Introduction

The program in Wildlife Management specializes veterinary professionals from a global standpoint. It offers specialized knowledge to address future practice with solvency regardless of the area of work or research.

Thanks to the knowledge acquired from field data, students will be able to analyze it to elaborate thematic maps based on any aspect that involves spatial information. This makes it possible to represent distribution data, plan and represent the plots or territorial areas under analysis, and generate maps based on thematic indexes such as richness, effort or density.

Together with distribution mapping, students will have access to documentary sources to download territorial variables linked to each species and thus be able to elaborate potential distribution maps that will help identify the most appropriate areas for a particular species, locate potential reintroduction sites or visualize the distribution ranges of the species in the face of climate change scenarios.

Do not miss the opportunity to take this Master's Degree in Wildlife Management with us. It's the perfect opportunity to advance your career"

The Master's Degree in Wildlife Management is a broadly specialized program with an inherent coherence to its structure, which allows specialization in the main disciplines related to wildlife conservation.

It addresses all the fundamental concepts that form the necessary ecological basis on which to build throughout the syllabus. In addition, it defines the fundamental international regulatory framework for biodiversity conservation.

It analyzes one of the main threats to biodiversity loss i.e., invasive alien species, establishing the main lines of action to manage them.

It examines how to monitor wildlife through direct or indirect observations, such as droppings, nests, pellets and other natural signs of wildlife, analyzing the main census methods used for fundamental species when developing wildlife monitoring programs.

It also addresses hunting management as one more piece of the puzzle in the treatment of wildlife and conservation, so the objective to be achieved will be to carry out a sustainable use of resources, setting rhythms that do not lead to the decrease of biological diversity in the long term while integrating other uses into the environment.

At the same time, it presents all the relevant aspects to estimate livestock burdens placed on the environment and to determine quotas to establish sustainable hunting management. It will also determine the main factors to analyze and incorporate when making a correct Technical Hunting Plan.

It analyzes the regulatory framework of wildlife diseases in detail, as well as action protocols in case of signs or suspicion of the main diseases associated with wildlife.

This Master's Degree provides specialized knowledge to perform an in-depth statistical analysis. All this is defined from a theoretical point of view in the first place, to be subsequently developed through Statistica software.

The program covers Distance software, the most widely used computer program to analyze wildlife sampling data, developing the necessary sections for data import, analysis configuration and validation of results.

Moreover, the territorial management of species is not an issue linked to field interpretation and management. Species distribution data are increasingly analyzed from a technological perspective in the office. The inclusion of teaching units based on technologies, such as geographic information systems, is useful to represent field data graphically and interpretatively through maps.

This **Master's Degree in Wildlife Management** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Case studies presented by experts in Wildlife
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development
- New developments in Wildlife Management
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Wildlife Management
- Theoretical lessons, questions for experts, discussion forums on controversial issues and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection

Specialize with us and learn the concepts associated with wildlife populations and the processes and interactions that take place"

This Master's Degree is the best investment you can make in the selection of an updated program in Wildlife Management"

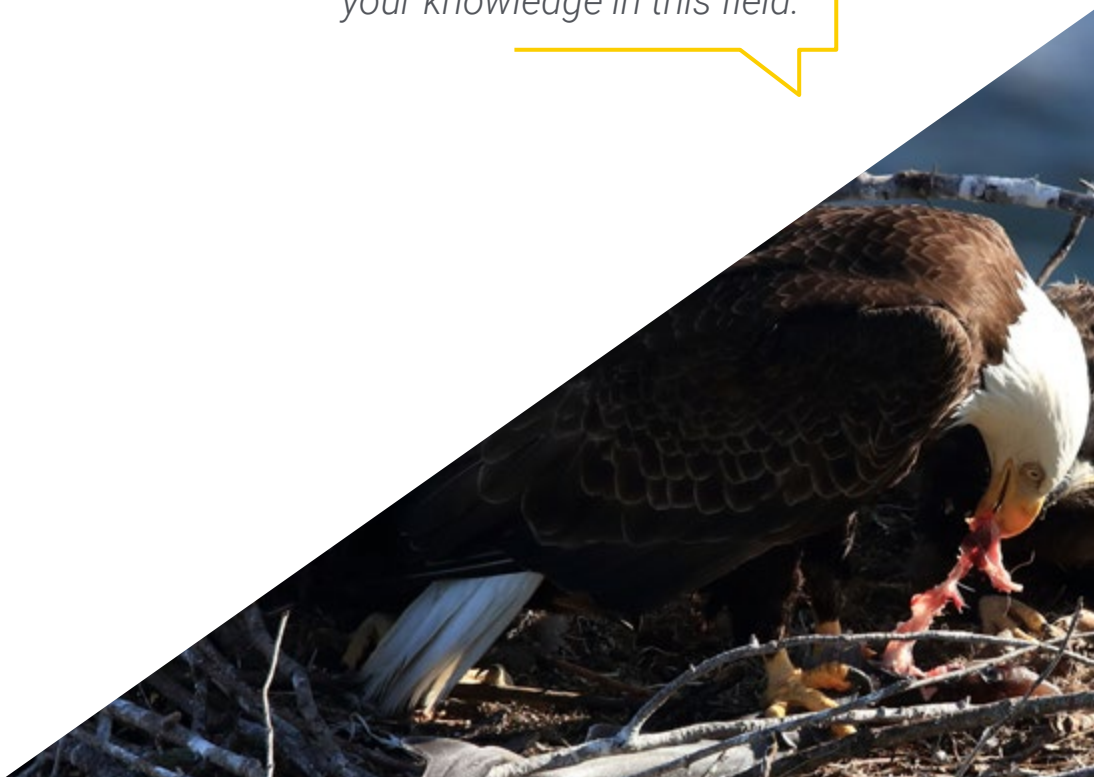
This program comes with the best educational material, providing you with a contextual approach that will facilitate your learning.

This 100% online Master's Degree will allow you to combine your studies with your professional work while increasing your knowledge in this field.

Its teaching staff includes professionals belonging to the veterinary field, who contribute their expertise to this specialization, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive specialization programmed to learn in real situations.

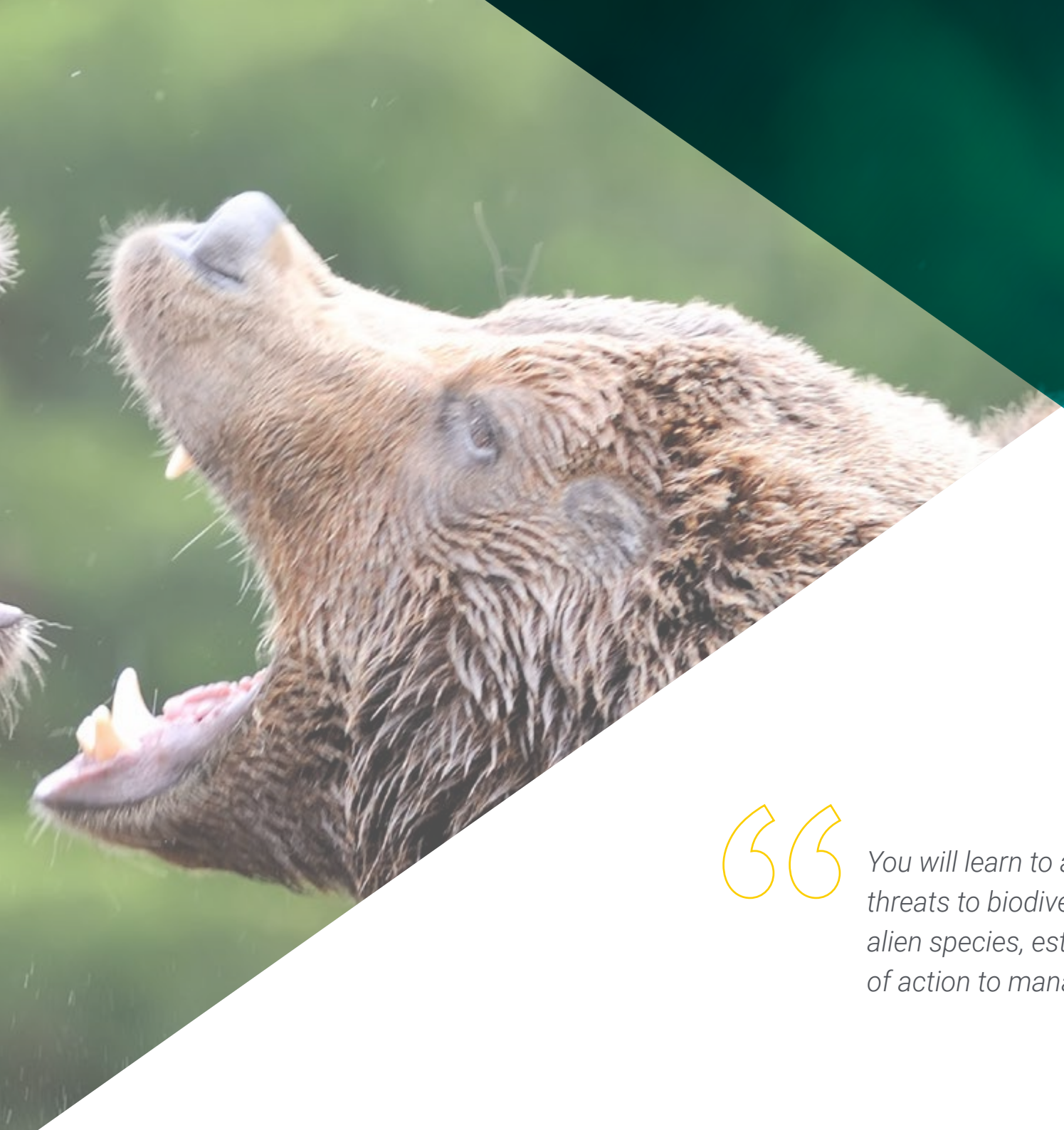
This program is designed around Problem-Based Learning, whereby the specialist must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative, interactive video system created by renowned and experienced experts in Wildlife Management



02

Objectives

The program in Wildlife Management is designed to facilitate the performance of veterinary professionals with the latest advances and most innovative procedures in the sector.



You will learn to analyze one of the main threats to biodiversity loss, i.e., invasive alien species, establishing the main lines of action to manage them"

General Objectives

- Establish the ecological basis to understand the relevant concepts in the area
- Develop the concepts associated with wildlife populations and the processes and interactions that take place
- Establish the differences between the types of surrogate species and how to read them as environmental indicators
- Compile energy flows and processes that take place in different ecosystems
- Discuss the international regulatory framework of Wildlife Management
- Examine the main legal implementation tools in biodiversity conservation at the European level
- Discuss the tools used in the three main areas of biodiversity conservation: sites, species and environmental conservation
- Establish management mechanisms in line with the regulations discussed
- Discuss the international regulatory framework of Wildlife Management
- Examine the main implementation tools in biodiversity conservation
- Discuss the tools used in the three main areas of biodiversity conservation: sites, species and environmental conservation
- Establish management mechanisms in line with the regulations discussed
- Analyze the main direct and indirect wildlife observation methods
- Establish the factors necessary to design monitoring programs
- Develop the main species census methods
- Choose the appropriate census methodology
- Determine the official resources that yield species distribution information
- Examine the resources available to characterize potential habitats where species are distributed
- Introduce the different portals that provide species conservation data and identify or interpret each type of data
- Learn more about the formats and types of data and files offered by these portals
- Understand the potential of geographic information systems (GIS) in the management of species distribution data, their environments and monitoring strategies
- Manage QGIS software to manage field sampling data
- Analyze the available territorial data to obtain strategic maps that fulfill specific functions in species management
- Represent the available information and the processed results within GIS
- Know the cartographic requirements to manage Maxent
- Manage using Maxent working software
- Identify the program's input and output file formats
- Interpret modeling results

- Analyze the measures used in sustainable hunting management
- Examine the variables associated with calculating loads and quotas
- Describe the main hunting modalities and associated species
- Establish the aspects to be developed in elaborating Technical Hunting Plans
- Analyze the importance of health surveillance in Wildlife Management
- Examine the main action protocols in case of signs of disease
- Discuss the main wildlife diseases
- Establish control methodologies before and after the appearance of new cases
- Present the main computer tools used in Wildlife Management
- Compile the statistical bases necessary to analyze data related to Wildlife Management
- Evaluate Statistica software for statistical data analysis
- Thoroughly examine distance sampling and its variants using Distance software

Specific Objectives

Module 1. Fundamentals of Ecology

- Define the different biological indicators associated with the study of animal populations
- Develop population dynamics through the definition of species life history strategies
- Establish the critical periods in the life cycle of species and their vulnerability to extinction
- Study surrogate species, through real examples, and identify differences and similarities between them
- Define the basics of plant ecology and plant-animal interactions
- Analyze the structure of ecosystems and the joint action of various factors that influence their development
- Value the energy flows and cycles that occur in the natural environment

Module 2. Regulatory Bases in Species Conservation

- Develop the main lines of action at the international level in biodiversity conservation
- Analyze the objectives of the Convention on International Trade in Endangered Species of Wild Fauna and Flora and its strategy
- Develop the Convention on Biological Diversity as a basic international reference on biodiversity concerns
- Establish the Ramsar Convention as a basic tool in the conservation and wise use of wetlands and their resources
- Analyze the main European directives in the field of biodiversity conservation

Module 3. Wildlife Management

- Understand the threats and factors that lead to the loss of natural resources and the extinction of species
- Define the main strategies used in endangered species conservation
- Compile actions to be carried out on habitats and on each of the links in the chain from diet onwards, framed within in-situ management frameworks
- Develop captive breeding and reintroductions as two of the main ex-situ management mechanisms
- Define the overlap between forest management and species conservation
- Analyze the problem of invasive alien species and define the main lines of action in this area

Module 4. Wildlife Census

- Identify fundamental methods and tools used to identify wildlife signs
- Facilitate understanding of key parameters when designing wildlife census
- Learn to identify the remains of the main wildlife species
- Introduce photo-trapping as one of the indirect population monitoring techniques
- Analyze the adequacy of static versus dynamic censuses according to the target species
- Determine the key factors in analysing wildlife tracks

Module 5. Resources to Acquire and Analyze Data on Species Distribution, Natural Areas and Environmental Habitat Variables

- Access official conservation data on species included in the European Natura 2000 Network through their official databases or Natura 2000 Standard Data Forms
- Consult conservation data and species distribution mapping through public and private organizations and institutions websites
- Warn of the potential offered by citizen science as a resource or documentary source for acquiring and sharing species distribution data and monitoring over time
- Learn about and explore websites to download information on species distribution linked to citizen science
- Identify land uses and networks of protected natural areas worldwide that may support or harbor species
- Consult and acquire, from official websites, descriptive digital models of the physical and biological environment of species, such as climatic data, physical data or territorial morphology, for further geographical analysis of potential distributions

Module 6. Spatial Management of Species using Geographic Information Systems in QGIS

- Understand the key functionalities offered by geographic information systems
- Manage basic symbology and geoprocessing analysis tools in QGIS
- Establish cartographic methodologies to manage territorial plots for species monitoring and analysis
- Dump and represent field data linked to species using GIS
- Manage QGIS plugins to virtually collect species distribution data
- Create thematic maps to represent particular aspects of censuses or inventories, such as richness maps or effort maps
- Analyze territorial variables in order to obtain species suitability maps that can be used for conservation purposes
- Develop ecological corridors between natural areas in order to plan conservation routes for species migration
- Understand the key concepts linked to field data collection in order to obtain correctly documented and technically feasible cartography

Module 7. Potential Species Distribution Modeling with Maxent

- Recognize the specific input file formats supported by the program so the model works correctly
- Correctly produce quality mapping of territorial variables to run a model
- Correctly cite the coordinate structure of species distribution to run a model
- Understand the different types of models generated by Maxent
- Model the potential distribution of species, both in present and future time
- Interpret the data, graphs, and visual maps provided by Maxent as a result of spatial data analysis
- Represent and interpret the resulting data through a GIS such as QGIS

Module 8. Game Management

- Specify the scales of conservation associated with wildlife management
- Identify the methods to regulate grazing and the limits to ensure environmental sustainability
- Present the methodologies used for burden estimation
- Define interactions and compatibilities in big and small game management
- Compile the legal framework and tools in game management
- Develop the main methodologies to calculate quotas
- Define the structure of a Technical Hunting Plan

Module 9. Wildlife Disease

- Identify the symptomatologic pictures of the most relevant infectious and parasitic wildlife diseases
- Analyze the relevance of wildlife health status in public health and species conservation
- Examine the regulatory bases in wildlife health management with a focus on international regulations
- Compile the different sources of scientific animal health documentation and information
- Provide the necessary knowledge to prepare reports and projects
- Establish methodologies and strategies for preventive control of the main wildlife diseases
- Develop the measures for the elimination and disinfection of the affected fauna, as well as the correct surveillance of the health safety of the personnel in charge of such tasks

Module 10. Wildlife Management Software: Statistica and Distance

- Develop the basic concepts necessary to carry out a correct statistical analysis from the data identification stage
- Provide the fundamental skills to use statistical models in response to problems encountered
- Assess the influence of covariates in establishing relationships of interest
- Obtain reliable information on the conservation status of the populations under study
- Assess population trends based on the statistical analyses carried out to make adequate decisions
- Introduce the use of Distance software to properly import data obtained in the field
- Establish the necessary parameters in the design and configuration of data analysis using Distance

03

Course Management

The program's teaching staff includes leading experts in Wildlife Management, who contribute their vast work experience to this specialization program. Renowned professionals have joined forces to offer you this high-level program.

Our expert team of professors in Wildlife will help you achieve professional success"

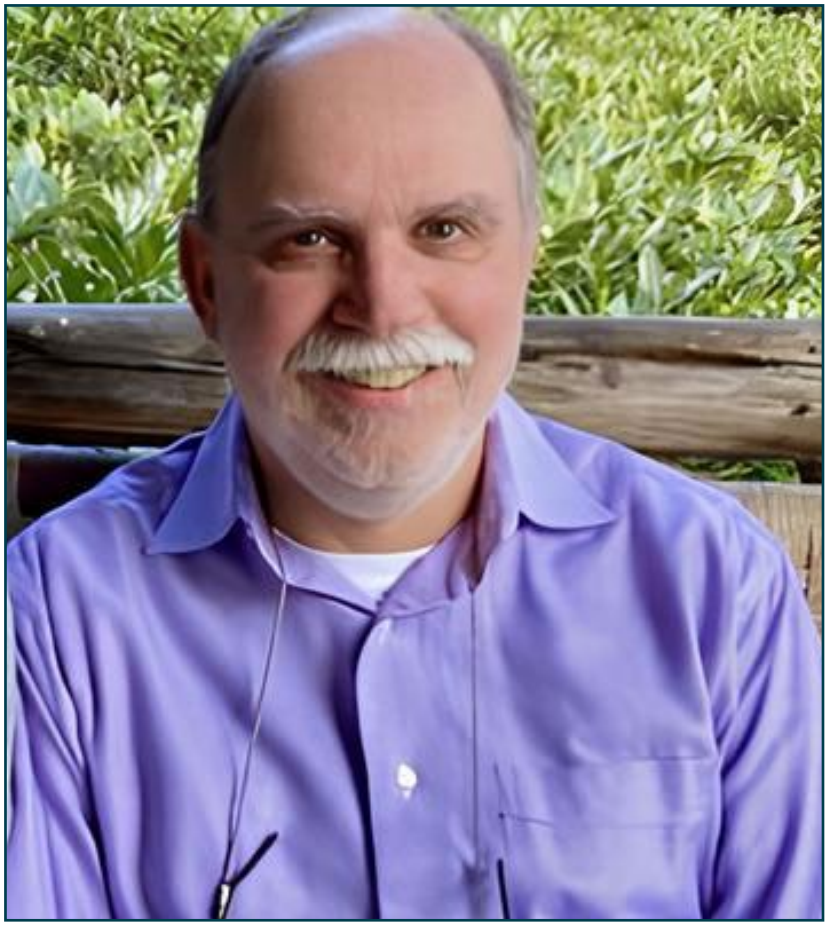
International Guest Director

With a focus on Conservation and Wildlife Ecology, Allard Blom has become a prestigious Environmental Consultant. He has spent most of his professional career in non-profit organizations, including the World Wildlife Fund (WWF), where he has led numerous initiatives in collaboration with local communities in the Democratic Republic of Congo.

He has also overseen projects to counter corruption in natural resource management in Madagascar. In line with this, he has provided technical advice related to both landscape and wildlife preservation in general terms. In addition, he has played an active role in fundraising and collaborating with partners or stakeholders to manage natural protected areas.

Among his main achievements was his work in the development of the Dzanga-Sangha Special Reserve. There, he promoted a long-term sustainable financing strategy, consisting of a tri-national Conservation Trust Fund. He also designed a successful gorilla habituation scheme, which provided tourists with the opportunity to visit gorillas in their natural habitat under the supervision of the Bayaka people. In addition, he contributed significantly to the establishment of the Okapis Wildlife Reserve, which was designated a UNESCO World Heritage Site.

It is worth mentioning that he combines this work with his facet as a Scientific Researcher. In this sense, he has published multiple articles in the media specialized in Nature and Fauna. His main lines of research focus on biodiversity in protected areas of tropical forests and endangered animals such as elephants in Zaire. Thanks to this, he has been able to raise public awareness of these realities and has encouraged various organizations to intervene in favor of these causes.



Dr. Blom, Allard

- Vice President of WWF's Integrated Global Programs in the Democratic Republic of Congo
- Collaborator in European Union Conservation Initiative to help establish Lopé National Park in Gabon, Central Africa
- Ph.D. in Production Ecology and Resource Conservation from Wageningen University
- Degree in Biology and Ecology from Wageningen University
- Zoological Society of New York
- Conservation Society International in Virginia, United States

Thanks to TECH, you will be able to learn with the best professionals in the world"

Management

Mr. Matellanes Ferreras, Roberto

- Degree in Environmental Sciences, Rey Juan Carlos University
- Master's Degree in Training Management Management and development of training plans, European University, Madrid
- Master's Degree in Big Data and Business Intelligence, Rey Juan Carlos University
- Course on Pedagogical Aptitude in Natural Sciences, Complutense University, Madrid
- Unmanned Aerial Vehicle Pilot, State Agency of Aviation Safety (AESA)
- Technician in Management of Protected Natural Spaces, Official College of Forestry Technical Engineers
- Technician in Environmental Impact Assessment, Politécnica University, Madrid
- Professor of Geographic Information Systems applied to the conservation of species and protected natural areas
- Conservation and national biodiversity management projects linked to species and protected natural areas
- Management, documentation and monitoring of species distribution inventories
- Territorial analyses for the reintroduction of protected species
- Analysis of the conservation status of species linked to the Natura 2000 Network for European sexennial reports (Directive 92/43/EEC and Directive 79/409/EEC)
- Inventory management of national and international wetland natural areas

Ms. Pérez Fernández, Marisa

- Forestry Polytechnic University of Madrid
- Master's Degree in Integrated Quality, Environmental and Occupational Health and Safety Management Systems, OHSAS
- San Pablo CEU University
- 3rd Year, Degree in Mechanical Industrial Engineering UNED
- Teaching Experience: Forest management for biodiversity conservation, natural inventories, integrated management of the natural environment, sustainable game management Technical bases and Technical Hunting Plans
- Senior Technician in Environmental Assessment, Engineering and Environmental Quality Management TRAGSATEC
- Technical Assistant TECUM Project (Tackling Environmental Crimes through standardized Methodologies) B&S Europe
- Field instructor on the Forest Arsonist Profiling project Environmental and Urban Planning Prosecutor's Office General Prosecutor's Office of the State
- Environmental Technician SEPRONA Spanish Civil Guard Headquarters
- Environmental Work Management of the Fraga-Mequinenza Gas Pipeline ENDESA Gas Transporter IIMA CONSULTING FIRM

04

Skills

After passing the assessments for the Master's Degree in Wildlife Management, students will have acquired the skills required to provide quality and up-to-date praxis based on the most innovative didactic methodology.

This program will help you acquire the skills you need to excel in your daily work"

General Skills

- Manage wildlife more effectively and efficiently
- Design, develop, implement, and monitor strategies for wildlife and environmental conservation

Take the step to get up to speed on Wildlife Management"

Specific Skills

- Develop the concepts associated with wildlife populations and the processes and interactions that take place
- Discuss the tools used in the three main areas of biodiversity conservation: sites, species and environmental conservation
- Analyze the main direct and indirect wildlife observation methods
- Manage QGIS software to manage field sampling data
- Manage using Maxent working software
- Describe the main hunting modalities and associated species
- Discuss the main wildlife diseases
- Evaluate Statistica software for statistical data analysis

05

Structure and Content

The content has been structured and designed by leading professionals in Wildlife Management, who have extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and who have extensive knowledge of new technologies applied to veterinary medicine.

We have the most complete and up-to-date academic program in the market. We strive for excellence and for you to achieve it too"

Module 1. Fundamentals of Ecology

1.1. General Ecology I
- 1.1.1. Reproduction Strategies
- 1.1.2. Biological Indicators
  - 1.1.2.1. Productivity
  - 1.1.2.2. Sex Ratio
  - 1.1.2.3. Flight Rate
  - 1.1.2.4. Operational Birth Rate
  - 1.1.2.5. Reproductive Success

1.2. General Ecology II
- 1.2.1. Birth Rate and Mortality
- 1.2.2. Growth
- 1.2.3. Density and Assessment

1.3. Population Ecology
- 1.3.1. Gregariousness and Territorialism
- 1.3.2. Feeding Area
- 1.3.3. Activity Patterns
- 1.3.4. Age Structure
- 1.3.5. Predation
- 1.3.6. Animal Nutrition
- 1.3.7. Extinction: Critical Periods

1.4. Biodiversity Preservation
- 1.4.1. Life Cycle Critical Periods
- 1.4.2. International Union for Conservation of Nature (IUCN) Categories
- 1.4.3. Conservation Indicators
- 1.4.4. Vulnerability to Extinction

1.5. Surrogate Species I
- 1.5.1. Keystone Species
  - 1.5.1.1. Description
  - 1.5.1.2. Real Examples
- 1.5.2. Umbrella Species
  - 1.5.2.1. Description
  - 1.5.2.2. Real Examples

1.6. Surrogate Species II
- 1.6.1. (Flagship Species)
  - 1.6.1.1. Description
  - 1.6.1.2. Real Examples
- 1.6.2. Indicator Species
  - 1.6.2.1. Biodiversity Status
  - 1.6.2.2. Habitat Status
  - 1.6.2.3. Population Status

1.7. Plant Ecology
- 1.7.1. Plant Successions
- 1.7.2. Animal-Plant Interaction
- 1.7.3. Biogeography

1.8. Ecosystems
- 1.8.1. Structure
- 1.8.2. Factors

1.9. Biological Systems and Communities
- 1.9.1. Community
- 1.9.2. Structure
- 1.9.3. Biomass

1.10. Energy Flows
- 1.10.1. Nutrient Cycles

Module 2. Regulatory Bases in Species Conservation

2.1. Convention on Biological Diversity
- 2.1.1. Mission and Objectives
- 2.1.2. Strategic Plan for Biological Diversity

2.2. Convention on International Trade in Endangered Species of Wild Fauna and Flora
- 2.2.1. Structure and Objectives
- 2.2.2. Appendices I, II and III

2.3. Ramsar Convention
- 2.3.1. Structure and Objectives
- 2.3.2. Designation of Ramsar Sites

2.4. Other International Conventions
- 2.4.1. United Nations Convention to Combat Desertification
- 2.4.2. Bonn Convention on the Conservation of Migratory Species
- 2.4.3. OSPAR Convention

2.5. Berna Convention
- 2.5.1. Structure and Objectives

2.6. South America: National Strategies for Biodiversity
- 2.6.1. Mission and Objectives
- 2.6.2. Main Lines of Action

Module 3. Wildlife Management

3.1. Management of Protected Natural Areas
- 3.1.1. Introduction
- 3.1.2. Structure
- 3.1.3. Restrictions

3.2. Management of Endangered Species Conservation
- 3.2.1. Action Plans
- 3.2.2. Recovery Plans

3.3. Forest Management
- 3.3.1. Forest Planning
- 3.3.2. Management Projects
- 3.3.3. Main Overlap between Forestry Management and Species Conservation

3.4. On-Site Management
- 3.4.1. Actions on the Habitat
- 3.4.2. Actions on Prey and Predators
- 3.4.3. Actions on Diet

3.5. Off-Site Management
- 3.5.1. Captive Breeding
- 3.5.2. Reintroductions
- 3.5.3. Translocations
- 3.5.4. Recovery Centers

3.6. Invasive Alien Species (IAS) Management
- 3.6.1. Strategies and Plans

3.7. Management Tools: Access to Information
- 3.7.1. Data Sources

3.8. Management Tools: Strategies
- 3.8.1. Main Lines
- 3.8.2. Strategies against the Main Threats

Module 4. Wildlife Census

4.1. Introduction to Observation Methods
- 4.1.1. Direct Observation
- 4.1.2. Signs
  - 4.1.2.1. Direct Signs
  - 4.1.2.2. Indirect Signs
- 4.1.3. Electric Fishing

4.2. Indirect Signs: Natural Signs I
- 4.2.1. Natural Signs
  - 4.2.1.1. Tracks
  - 4.2.1.2. Paths and Steps
  - 4.2.1.3. Droppings and Pellets

4.3. Indirect Signs: Natural Signs II
- 4.3.1. Sleeping Sites, Beds and Burrows
- 4.3.2. Territorial Markings
- 4.3.3. Moults, Hairs, Feathers and Other Remains

4.4. Indirect Signs: Techniques
- 4.4.1. Devices
  - 4.4.1.1. Hair Traps
  - 4.4.1.2. Sand Traps
  - 4.4.1.3. Photo-Trapping

4.5. Census Design
- 4.5.1. Previous Concepts
  - 4.5.1.1. Sizes and Density
  - 4.5.1.2. Abundance Index
  - 4.5.1.3. Accuracy and Precision
- 4.5.2. Populations
  - 4.5.2.1. Aggregate Distribution
  - 4.5.2.2. Uniform Distribution
  - 4.5.2.1. Manipulable
- 4.5.3. Detectability and Catchability
- 4.5.4. GPS Data Acquisition

4.6. Direct Census: Static
- 4.6.1. Searches
- 4.6.2. Observation Points
- 4.6.3. Estimates from Hunting

4.7. Direct Census: Dynamic Census
- 4.7.1. Plot Census without Search
- 4.7.2. Fixed Band Transects
- 4.7.3. Line Transects
  - 4.7.3.1. Capture-Recapture
    - 4.7.3.1.1. Modifying of the Number of Individuals
    - 4.7.3.1.2. Not Modifying the Number of Individuals

4.8. Wildlife Monitoring
- 4.8.1. Introduction to Ethology
- 4.8.2. Research Design
  - 4.8.2.1. Behavior Description
  - 4.8.2.2. Category Selection
  - 4.8.2.3. Behavior Measures
  - 4.8.2.4. Types of Sampling
  - 4.8.2.5. Types of Recording
  - 4.8.2.6. Inventories

4.9. Tracks
- 4.9.1. Influencing Factors
- 4.9.2. Ecological Information
- 4.9.3. Morphology
- 4.9.4. Finding and Preserving Tracks
- 4.9.5. Keys

4.10. Wildlife Monitoring Programs

Module 5. Resources to Acquire and Analyze Data on Species Distribution, Natural Areas and Environmental Habitat Variables

5.1. International Union for Conservation of Nature and Natural Resources (UICN)
- 5.1.1. Species Data and Distribution
- 5.1.2. Tools Available to Analyze Species Distribution Data

5.2. Global Biodiversity Information Facility (GBIF)
- 5.2.1. Species Data and Distribution
- 5.2.2. Tools Available to Analyze Species Distribution Data

5.3. e-BIRD
- 5.3.1. Citizen Science in Global Massive Species Data Management
- 5.3.2. Data and Distribution of Avifauna from Citizen Science

5.4. MammalNet
- 5.4.1. Data and Monitoring of Mammals from Citizen Science

5.5. Ocean Biodiversity Information System (OBIS)
  5.5.1. Species Distribution Data of Marine Species
5.6. Species and Habitats included in Natura 2000
  5.6.1. Distribution Mapping of Natura 2000 Sites
  5.6.2. Documentary Databases of Species, Habitats and Official Ecological Information
  5.6.3. Monitoring Distribution, Pressures, Threats and Conservation Status through Official Sexennial Reports
5.7. World Network of Protected Natural Spaces
  5.7.1. Protected Planet in Territorial Species Management
5.8. Natural Environments and Land Use
  5.8.1. Corine Land Cover (CLC) Land Uses
  5.8.2. Global Land Cover (GLC) of the European Space Agency for the Identification of Natural Environments
  5.8.3. Land Resources Linked to Forest Environments
  5.8.4. Land Resources Linked to Wetlands
5.9. Bio-Climatic Environmental Variables for Species Habitat Modeling
  5.9.1. World Clim
  5.9.2. Bio-Oracle
  5.9.3. Terra Climate
  5.9.4. ERA5 Land
  5.9.5. Global Weather
5.10. Morphological Environmental Variables for Species Habitat Modeling
  5.10.1. Digital Elevation Models
  5.10.2. Digital Terrain Models

Module 6. Spatial Management of Species using Geographic Information Systems in QGIS

6.1. Introduction to Geographic Information Systems (GIS)
  6.1.1. Introduction to Geographic Information Systems
  6.1.2. Mapping File Formats for Species Analysis
  6.1.3. Main Geoprocessing Analyses for Species Management
6.2. Reference Systems in Map Files
  6.2.1. The Importance of Reference Systems in the Visualization and Accuracy of Field Data Linked to Species Distribution
  6.2.2. Examples of Correct and Incorrect Data Management in Species Domains
6.3. QGIS Interface
  6.3.1. Introduction to QGIS
  6.3.2. Interface and Sections to be Analyzed and Data Display
6.4. Data Visualization and Display on QGIS
  6.4.1. Visualizing Mapping Data on QGIS
  6.4.2. Attribute Tables for Querying and Documenting Information
  6.4.3. Symbolism for Sample Representation
6.5. QGIS Plug-ins for Species Mapping and Analysis
  6.5.1. QGIS Plug-ins
  6.5.2. GBIF Plug-in
  6.5.3. Natusfera Plug-in
  6.5.4. Species Explorer Plug-in
  6.5.5. Citizen Science Platforms and Other Analysis Plug-ins
6.6. Cartographic Management of Sample Plots and Field Monitoring
  6.6.1. Geometric Planning of Sampling Plots and Grids
  6.6.2. Representation of Distribution Data, Sampling Data and Transects in the Field
6.7. Species Richness and Effort Maps
  6.7.1. Analysis of Species Richness Data
  6.7.2. Representation of Richness Maps
  6.7.3. Analysis of Effort Data
  6.7.4. Representation of Effort Maps

6.8. Practical Example: Multi-Criteria Analysis for Species Suitability Maps
- 6.8.1. Introduction to the Use of Land Suitability Maps
- 6.8.2. Analysis of Environmental Variables Linked to the Species
- 6.8.3. Analysis of Suitability Values for the Variables
- 6.8.4. Elaboration of Land Suitability Maps for Species

6.9. Creation of Ecological Corridors for Species Distribution
- 6.9.1. Introduction to Spatial Connectivity Strategies to Create Ecological Corridors
- 6.9.2. Resistance and Friction Maps vs. Suitability Maps
- 6.9.3. Identification of Connectivity Points
- 6.9.4. Development of Ecological Corridors for Species Distribution

6.10. Considerations for Field Data Collection
- 6.10.1. Available Technologies
- 6.10.2. Device Configuration prior to Data Collection
- 6.10.3. Technical Considerations in Data Documentation
- 6.10.4. Considerations according to the Scale of Work

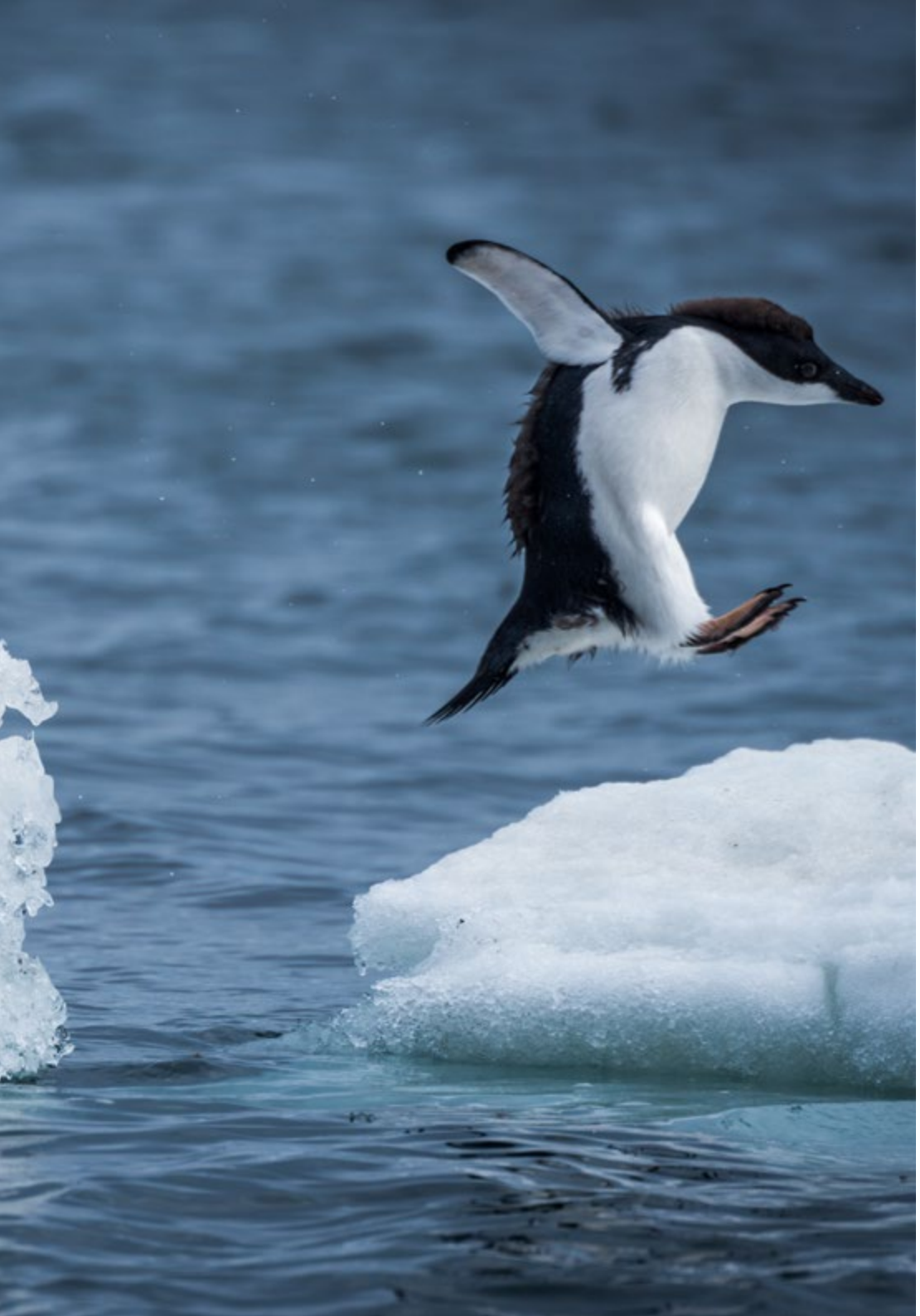
Module 7. Potential Species Distribution Modeling with Maxent

7.1. Maxent and Predictive Models
- 7.1.1. Introduction to Maxent
- 7.1.2. Species Distribution Analysis File Formats

7.2. Prediction Analysis Mapping
- 7.2.1. Species Distribution Coordinates
- 7.2.2. Environmental Variables for Species Analysis

7.3. Cartographic Resources for Species Modeling
- 7.3.1. Baseline Data for Modeling
- 7.3.2. Resources to Obtain Territorial Environmental Variables
- 7.3.3. Resources to Obtain Species Distribution Data
- 7.3.4. Strategies to Convert Data to Maxent Required Formats

7.4. Format Restrictions and Limitations in Species Modeling Input Data
- 7.4.1. Format Standardization for Species Distribution Coordinates
- 7.4.2. Raster Format Standardization for Species-Dependent Territorial Variables



7.5. Maxent Management Interface for Species Distribution Modeling
- 7.5.1. Data Entry Sections and Program Configuration
- 7.5.2. Main Errors to Avoid during Modeling

7.6. Modeling Options
- 7.6.1. Logistic Model
- 7.6.2. Cumulative Model
- 7.6.3. Raw Model
- 7.6.4. Modeling under Future Scenarios

7.7. Potential Modeling with Variables and Distribution Data
- 7.7.1. Species Distribution Coordinates
- 7.7.2. Species-Dependent Raster Variables
- 7.7.3. Generation of Potential Species Distribution Models

7.8. Maxent Data Simulation and Display
- 7.8.1. Omission/Commission
- 7.8.2. Variable Contribution
- 7.8.3. Response Curves
- 7.8.4. Resulting Distribution Maps
- 7.8.5. Supplementary Analytical Data
- 7.8.6. Data Validation and Testing

7.9. Future Predictions for Territorial Change Scenarios
- 7.9.1. Future Environmental Variables
- 7.9.2. Future Scenario Modeling

7.10. Display and Interpretation of Models in QGIS
- 7.10.1. Importing Results in QGIS
- 7.10.2. Symbology and Visualization of Results in QGIS

Module 8. Hunting and Game Management

8.1. Introduction to Hunting and Game Management
- 8.1.1. Hunting and Game Management and Species Conservation
- 8.1.2. Conservation Scales
  - 8.1.2.1. Sustainability
  - 8.1.2.2. Habitat Conservation
  - 8.1.2.3. Species Conservation
  - 8.1.2.4. Conservation of Genetic Variability

8.2. Grazing Regulation Systems
- 8.2.1. Limits of the Environment
- 8.2.2. Grazing Control Methods
  - 8.2.2.1. Rotational
  - 8.2.2.2. Continuous

8.3. Burden Estimation
- 8.3.1. Calculation Methods
  - 8.3.1.1. Calculating Simplified Burden Capacity
  - 8.3.1.2. Calculating Monthly Burden Capacity
  - 8.3.1.3. Calculating Herbivore Requirements
  - 8.3.1.4. The "Andalusian" Method
- 8.3.2. Indicators

8.4. Big Game Hunting Management
- 8.4.1. Forestry
  - 8.4.1.1. Objectives
  - 8.4.1.2. Interactions
  - 8.4.1.3. Compatibilities
  - 8.4.1.4. Management Actions
- 8.4.2. Agriculture
  - 8.4.2.1. Objectives
  - 8.4.2.2. Interactions
  - 8.4.2.3. Compatibilities
  - 8.4.2.4. Management Actions

8.5. Small Game Hunting Management
- 8.5.1. Forestry
  - 8.5.1.1. Objectives
  - 8.5.1.2. Interactions
  - 8.5.1.3. Compatibilities
  - 8.5.1.4. Management Actions
- 8.5.2. Agriculture
  - 8.5.2.1. Objectives
  - 8.5.2.2. Interactions
  - 8.5.2.3. Compatibilities
  - 8.5.2.4. Management Actions

8.6. Hunting Modalities
- 8.6.1. Big Game Hunting
  - 8.6.1.1. Monteria Hunt
  - 8.6.1.2. Battue
  - 8.6.1.3. Approached Hunting or Stalking
  - 8.6.1.4. Stand Hunting or Posting
  - 8.6.1.5. Others
- 8.6.2. Small Game Hunting
  - 8.6.2.1. Oppressive Hunting with Dogs
  - 8.6.2.2. Flushing
  - 8.6.2.3. Posting
  - 8.6.2.4. Oppressive Hunting
  - 8.6.2.5. Baiting
  - 8.6.2.6. Others

8.7. Hunting and Game Planning
- 8.7.1. Technical Hunting Plans
  - 8.7.1.1. Initial Considerations
  - 8.7.1.2. Restrictions
- 8.7.2. Habitat Management Measures
  - 8.7.2.1. Forestry
  - 8.7.2.2. Agriculture
  - 8.7.2.3. Livestock

8.8. Quota Determination
- 8.8.1. Formulas for Small Game Hunting
  - 8.8.1.1. Estimates
  - 8.8.1.2. Example
- 8.8.2. Formulas for Big Game Hunting
  - 8.8.2.1. Estimates
  - 8.8.2.2. Example
- 8.8.3. Selective and Management Hunting
  - 8.8.3.1. Criteria

8.9. Main Game Species
- 8.9.1. Rabbits
  - 8.9.1.1. Basic Biology
  - 8.9.1.2. Ecological Requirements
  - 8.9.1.3. Hunting Modalities
- 8.9.2. Deer
  - 8.9.2.1. Basic Biology
  - 8.9.2.2. Ecological Requirements
  - 8.9.2.3. Hunting Modalities
- 8.9.3. Roe Deer
  - 8.9.3.1. Basic Biology
  - 8.9.3.2. Ecological Requirements
  - 8.9.3.3. Hunting Modalities
- 8.9.4. Partridge
  - 8.9.4.1. Basic Biology
  - 8.9.4.2. Ecological Requirements
  - 8.9.4.3. Hunting Modalities

Module 9. Wildlife Disease

9.1. Regulatory Framework
- 9.1.1. International Regulations
- 9.1.2. EU Standards

9.2. Wildlife Health Control
- 9.2.1. Containment
- 9.2.2. Contact Limitation
- 9.2.3. Prevalence Reduction
  - 9.2.3.1. Eradicating Wild Hosts by Removal
  - 9.2.3.2. Reducing Wild Host Density
  - 9.2.3.3. Reducing Other Risk Factors
  - 9.2.3.4. Treatments and Vaccinations

9.3. Wild Disease Indicators
- 9.3.1. Suspected Disease
  - 9.3.1.1. Action Protocol
- 9.3.2. Confirmation of the Disease
  - 9.3.2.1. Action Protocol
- 9.3.3. Management of Animal By-Products in Wildlife Diseases
- 9.3.4. Sample Collection
  - 9.3.4.1. Birds
  - 9.3.4.2. Mammals

9.4. Wildlife Health Surveillance Plan
- 9.4.1. Health Surveillance
  - 9.4.1.1. Geographical Scope
  - 9.4.1.2. Target Species
  - 9.4.1.3. Target Diseases
  - 9.4.1.4. Active Surveillance
  - 9.4.1.5. Passive Surveillance
- 9.4.2. Zoonoses
  - 9.4.2.1. Viral
  - 9.4.2.2. Bacterial
  - 9.4.2.3. Parasitic

9.5. Capture, Removal and Disinfection of Affected Wildlife
- 9.5.1. Capture
  - 9.5.1.1. Methods
- 9.5.2. Elimination
  - 9.5.2.1. Methods
- 9.5.3. Cleaning and Vector Control
  - 9.5.3.1. Disease Causing Agents
  - 9.5.3.2. Main Chemical Disinfectants
  - 9.5.3.3. Personal Safety Measures

9.6. Wildlife Disease: Ruminants
- 9.6.1. Pasteurellosis
- 9.6.2. Keratoconjunctivitis
- 9.6.3. Scabies
- 9.6.4. Tuberculosis
- 9.6.5. Foot and Mouth Disease
- 9.6.6. Ticks and Other Transmitted Diseases
- 9.6.7. Limping

9.7. Wildlife Disease: Wild Boars
- 9.7.1. Classical Swine Fever
- 9.7.2. African Swine Fever
- 9.7.3. Aujeszky's Disease
- 9.7.4. Tuberculosis
- 9.7.5. Foot and Mouth Disease
- 9.7.6. Ticks and Other Transmitted Diseases
- 9.7.7. Limping

9.8. Wildlife Disease: Carnivores
- 9.8.1. Distemper
- 9.8.2. Scabies
- 9.8.3. Aujeszky's Disease
- 9.8.4. Tuberculosis
- 9.8.5. Ticks and Other Transmitted Diseases

9.9. Wildlife Disease: Birds
- 9.9.1. Avian Influenza (Bird Flu)
- 9.9.2. Newcastle Disease
- 9.9.3. Botulism
- 9.9.4. Nile Fever and Other Flaviviruses

9.10. Wildlife Disease: Lagomorphs
- 9.10.1. Rabbit Hemorrhagic Disease
- 9.10.2. Scabies
- 9.10.3. Myxomatosis
- 9.10.4. Tularemia and Yersiniosis
- 9.10.5. Ticks and Other Transmitted Diseases

Module 10. Wildlife Management Software: Statistica and Distance

10.1. Statistica: Descriptive Statistics
- 10.1.1. Introduction
- 10.1.2. Statisticians
  - 10.1.2.1. Sample Size
  - 10.1.2.2. Media
  - 10.1.2.3. Fashion
  - 10.1.2.4. Standard Deviation
  - 10.1.2.5. Coefficient of Variation
  - 10.1.2.6. Variance
- 10.1.3. Use in Statistica

10.2. Statistica: Probability and Statistical Significance
- 10.2.1. Probability
- 10.2.2. Statistical Significance
- 10.2.3. Distributions
  - 10.2.3.1. Transformations

10.3. Statistics: Regressions
10.4. Statistics: Definition of Variables: Distributions in Discrete Variables
10.5. Statistics: Definition of Variables: Distributions in Continuous Variables
10.6. Statistica: Statistical Tests Part I
10.7. Statistica: Statistical Tests Part II
10.8. Distance: Introduction
    10.8.1. Types of Transects
        10.8.1.1. Line Transect
        10.8.1.2. Point Transect
    10.8.2. Calculating Distances
        10.8.2.1. Radially
        10.8.2.2. Perpendicularly
    10.8.3. Objects
        10.8.3.1. Individual
        10.8.3.2. Clusters
    10.8.4. Detection Function
        10.8.4.1. Selection Criteria
        10.8.4.2. Key Functions
            10.8.4.2.1. Uniform
            10.8.4.2.2. Semi-normal
            10.8.4.2.3. Negative Exponential
            10.8.4.2.4. Risk Rate
10.9. Distance: Approximation
    10.9.1. AIC
        10.9.1.1. Limitations
    10.9.2. Data Analysis
    10.9.3. Stratification
10.10. Distance: Example
    10.10.1. Data Entry
    10.10.2. Analysis Settings
    10.10.3. Truncation
    10.10.4. Data Grouping
    10.10.5. Stratification
    10.10.6. Validating Results

This specialization will allow you to comfortably advance in your career"

06

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

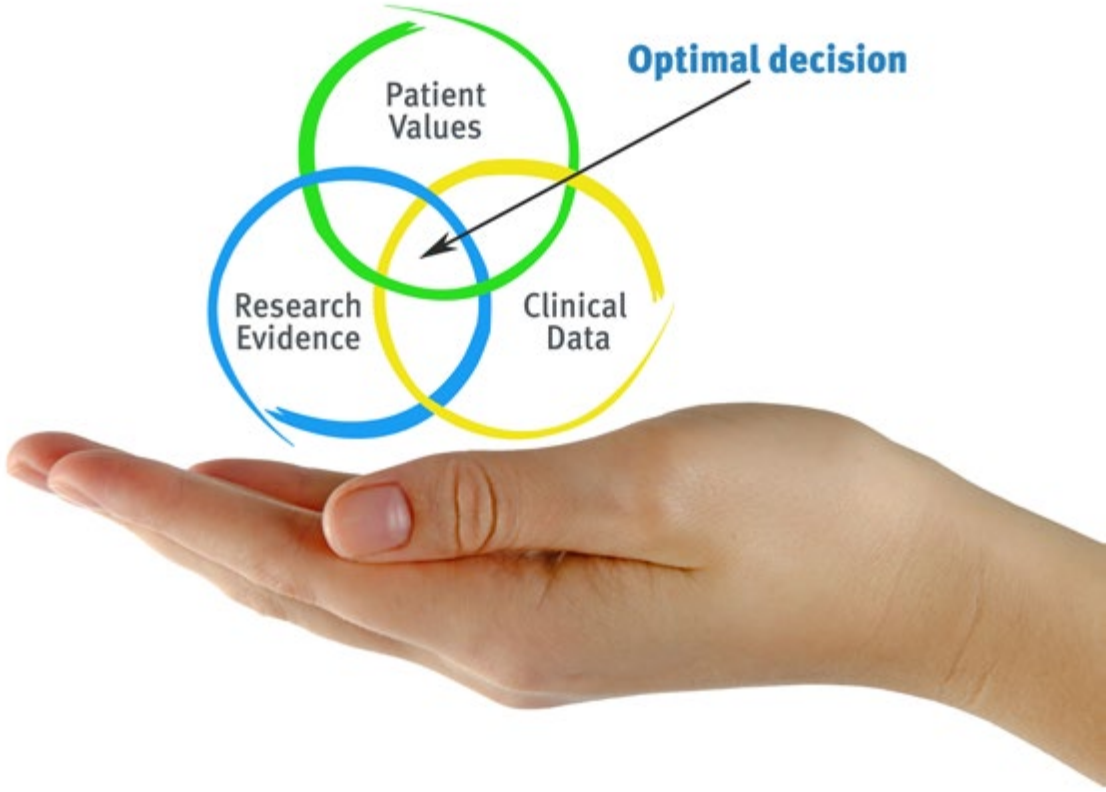
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the actual conditions in a veterinarian's professional practice.

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

The effectiveness of the method is justified by four fundamental achievements:

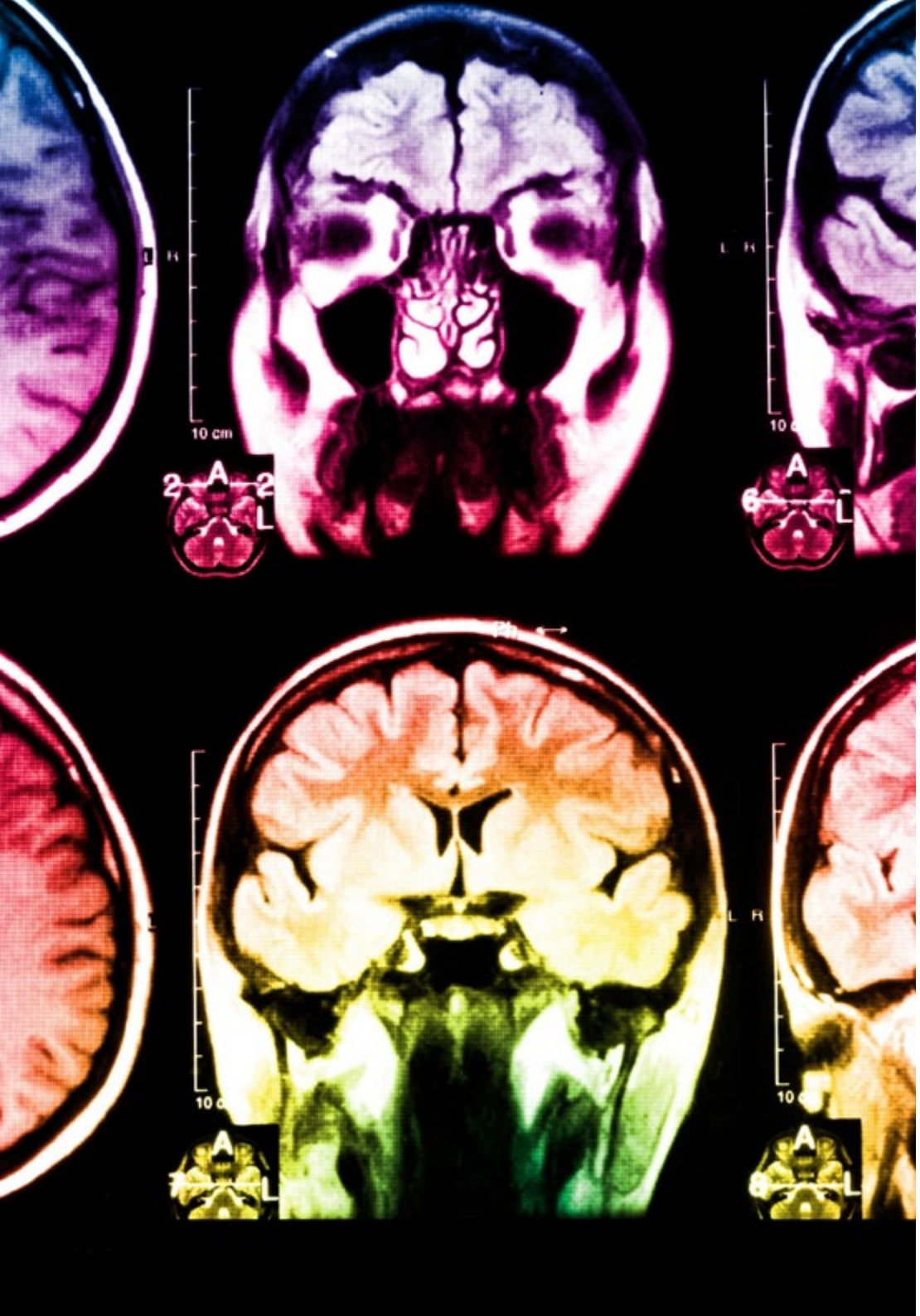
1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Veterinarians will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology more than 65,000 veterinarians have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. Our teaching method is developed in a highly demanding environment, where the students have a high socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.

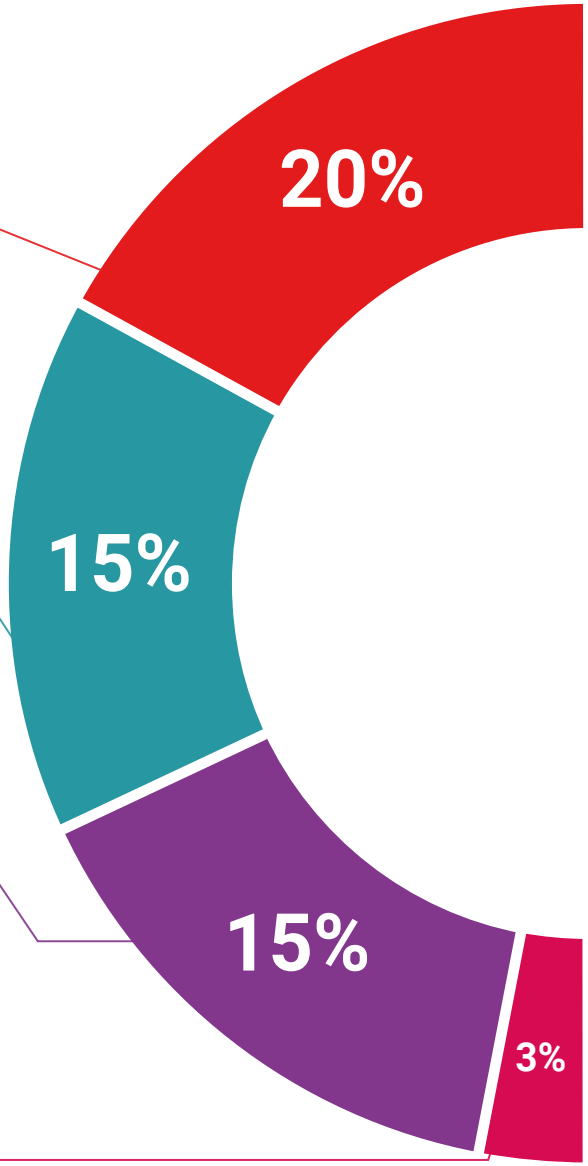
Interactive Summaries

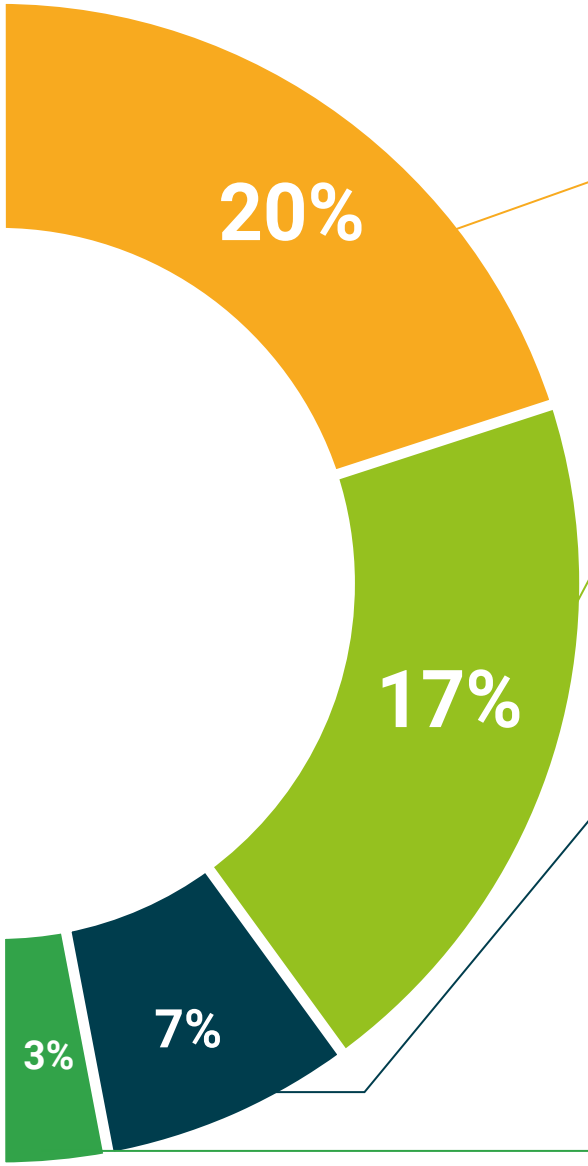
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

07

Certificate

The Master's Degree in Wildlife Management guarantees students, in addition to the most rigorous and up-to-date education, access to a Master's Degree issued by TECH Global University.

Successfully complete this program and receive your university degree without travel or laborious paperwork”

This program will allow you to obtain your **Master's Degree diploma in Wildlife Management** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (***official bulletin***). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Master's Degree in Wildlife Management**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**

tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Master's Degree in Wildlife Management

This is a program of 1,500 hours of duration equivalent to 60 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

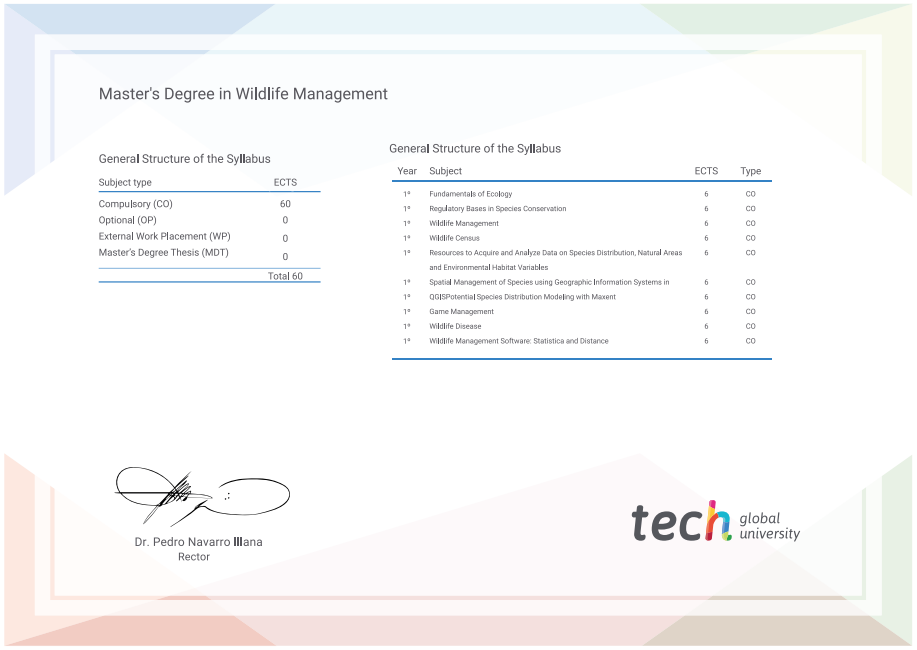
TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.

Unique TECH Code: AFWORD23S techtitute.com/certificates



Master's Degree in Wildlife Management

General Structure of the Syllabus

Subject type	ECTS
Compulsory (CO)	60
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
	Total 60

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Fundamentals of Ecology	6	CO
1º	Regulatory Bases in Species Conservation	6	CO
1º	Wildlife Management	6	CO
1º	Wildlife Census	6	CO
1º	Resources to Acquire and Analyze Data on Species Distribution, Natural Areas and Environmental Habitat Variables	6	CO
1º	Spatial Management of Species using Geographic Information Systems in	6	CO
1º	QGISPotential Species Distribution Modeling with Maxent	6	CO
1º	Game Management	6	CO
1º	Wildlife Disease	6	CO
1º	Wildlife Management Software: Statistica and Distance	6	CO

Dr. Pedro Navarro Illana
Rector

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*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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Master's Degree
Wildlife Management

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Global University**
- Credits: **60 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Master's Degree
Wildlife Management

tech global university