



CAREER POINT
UNIVERSITY



15 LIFE
ON LAND



LIFE ON LAND

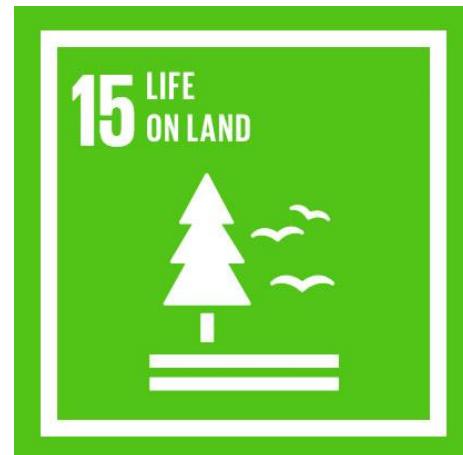
Protect, restore & promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification & halt & reverse land degradation & halt biodiversity loss



SDG 15: Life on Land

The purpose of **Sustainable Development Goal 15 (SDG 15)** is to protect, restore, and promote the sustainable use of terrestrial ecosystems, manage forests responsibly, combat desertification, halt and reverse land degradation, and prevent biodiversity loss. It aims to ensure that life on land—including plants, animals, forests, and soils—remains healthy and balanced by preserving natural habitats, preventing deforestation, protecting wildlife, and encouraging sustainable land use so that future generations can continue to benefit from the Earth's rich biodiversity.

Career Point University (CPU) is deeply committed to advancing SDG 15: *Life on Land*, emphasizing the protection, restoration, and sustainable use of terrestrial ecosystems. The University promotes environmental stewardship through education, research, and community engagement that foster the conservation of forests, biodiversity, and natural resources. CPU integrates the principles of ecosystem preservation and sustainability into its academic curriculum, particularly through courses in **Environmental Science, Agriculture, and Biotechnology**, which focus on biodiversity conservation, soil management, and sustainable land-use practices.



Contribution through Academic Courses

Career Point University (CPU) integrates the objectives of Sustainable Development Goal 15: Life on Land into its academic curriculum to promote understanding of biodiversity conservation and ecosystem sustainability. The University offers specialized courses that build students' knowledge of environmental systems, ecological balance, and sustainable land-use practices.

Courses such as

“Population and Community Ecology” and **“Ecology & Phytogeography (Botany–III)”** provide students with a deep understanding of the structure, function, and dynamics of ecosystems. These subjects focus on the interaction between living organisms and their environment, population growth patterns, species diversity, and the geographical distribution of plants.

Through these academic courses, students develop scientific knowledge and analytical skills essential for conserving biodiversity, protecting natural habitats, and managing ecosystems sustainably. This academic approach helps Career Point University contribute directly to the goals of SDG 15 – Life on Land, fostering environmentally responsible graduates who are equipped to address ecological challenges.

Contribution through Activities

Career Point University (CPU) actively contributes to **Sustainable Development Goal 15: Life on Land** through various awareness and field-based activities that promote ecosystem conservation and biodiversity protection.

One of the key initiatives organized by the University is **“Parthenium Awareness Week”**, which aims to educate students and the community about the harmful effects of *Parthenium hysterophorus* (a highly invasive weed) on human health, livestock, and native biodiversity. During this week, awareness campaigns, lectures, and eradication drives are conducted to control its spread and promote ecological balance. Additionally, CPU organized an **educational visit to the Himalayan Forest Research Institute (HFRI), Shimla, and Tara Devi Hills**, providing students with firsthand exposure to forest ecosystems, biodiversity conservation practices, and sustainable forestry management. This field experience enhanced students' understanding of the importance of preserving natural habitats and protecting terrestrial ecosystems.

Through such activities, Career Point University encourages environmental responsibility among students and strengthens its commitment to the goals of **SDG 15 – Life on Land**, fostering awareness, research, and action toward the protection and sustainable use of natural resources.

1. Event Report on Parthenium Awareness Week



SCHOOL OF AGRICULTURE SCIENCES

Title	Parthenium Awareness Week
Date	21 st to 27 th August, 2024
Introduction of the Event	<p><i>Parthenium hysterophorus</i>, commonly known as Congress grass, is a highly invasive species posing a significant threat to agricultural productivity, biodiversity, and human health. To combat this, the School of Agricultural Sciences proposes in association with NSS a week-long eradication campaign from 21st to 27th August 2024. This activity aims to engage students in hands-on environmental conservation efforts, enhancing their practical knowledge and community engagement.</p>
Objective of the Event	<ul style="list-style-type: none">Awareness and Education: Inform students and the local community about the risks associated with <i>Parthenium</i> weed.Practical Eradication Techniques: Demonstrate and implement effective methods for controlling <i>Parthenium</i>.Community Engagement: Encourage a sense of responsibility and teamwork among students and local residents as part of the NSS initiative.
Beneficiaries of the Event	<ul style="list-style-type: none">EnvironmentFarmersStudentsLivestock



Details of the Guests	None
Brochure or creative of the event	<p>School of Agricultural Sciences, CPU <i>organizing</i></p> <h1>PARTHENIUM AWARENESS WEEK</h1> <p>Theme: Eradication of parthenium in villages near by university campus</p> <p></p> <p> CAREER POINT UNIVERSITY</p>
Schedule of the Event	<p>Day 1 (August 21):</p> <p>Opening Ceremony:</p> <ul style="list-style-type: none"> • Inauguration by Hon'ble Prof(Dr) Sumer Singh,President, CPU • Introduction to Parthenium and its impacts by Dr. Gunnjeet Kaur, Associate Dean School of Agricultural Sciences • Introductory Presentation by Dr. Narendra Kumar Bhinda, Assistant Professor, Department of Agronomy, School of Agricultural Sciences <p>Eradicated Area -OAT, CPU</p> <p>Practical session on identifying Parthenium in the field.</p> <ul style="list-style-type: none"> • Eradication of Parthenium under the supervision of



	<p>Day 2 (August 22):</p> <p>Area -Near by Guest House, CPU</p> <ul style="list-style-type: none">• Eradication of Parthenium under the supervision of Dr. Dheerendra, Dr. Prateek, Mr. Rohitashv Nagar, Dr. Ratnakar, Dr. Maina Meena, Dr. Mahaveer, Mr. P.C. Choudhary, Dr. Jitendra Suman <p>Day 3 (August 23)</p> <p>Area -Cricket ground</p> <ul style="list-style-type: none">• Eradication of Parthenium under the supervision of Dr. Dheerendra, Dr. Mahaveer, Mr. P.C. Choudhary, Dr. Chetan <p>Day 4 (August 24)</p> <p>Area -Village Kasar</p> <ul style="list-style-type: none">• Practical session on identifying Parthenium in the field.• Interaction with farmers• Lecture delivered by Mr. Rohitashv Nagar to the farmers• Aware farmers community about the harmful effect of Parthenium• Eradication of Parthenium under the supervision of Dr. Dheerendra, Dr. Ratnakar, Dr. Maina Meena, Dr. Jitendra Suman <p>Day 7 (August 27)</p> <p>Area -Herbal Garden</p> <ul style="list-style-type: none">• Eradication of Parthenium under the supervision of Dr. Dheerendra, Dr. D.D. Tiwari, Dr. Jitendra Suman, Dr. Prateek
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Brief Description of the event	<p><i>Parthenium</i> Awareness Week, held from August 21 to August 27, was an initiative by the Agricultural Science department in collaboration with the National Service Scheme (NSS) club. The event aimed to educate students, faculty, and the local community about the dangers of <i>Parthenium</i>, an invasive weed that threatens agriculture, human health, and the environment.</p> <p>Each day from 11:00 AM to 12:00 Noon, a range of activities were conducted, including villages, cricket ground, OAT area, guest house, herbal garden and field visits. These sessions focused on identifying <i>Parthenium</i>, understanding its harmful effects, and learning sustainable management practices. The program also emphasized community involvement, with NSS volunteers engaging in outreach activities to spread awareness and promote action against the spread of this noxious weed.</p> <p>The event concluded with a closing ceremony that highlighted the key takeaways from the week, acknowledged the contributions of participants, and reinforced the importance of continued efforts in controlling <i>Parthenium</i>. This collaborative effort underscored the critical role that education and community action play in addressing environmental challenges. This activity was also conducted in two villages (Kasar & Alaniya) nearest to the campus for identification of <i>Parthenium</i> weed, understanding its harmful effects, and learning sustainable management practices.</p>
Photographs	 <p data-bbox="780 1579 1127 1698">Aalniya, Rajasthan, India 2W77+3QJ, Aalniya, Rajasthan 325003, India Lat 25.012097° Long 75.914459° 22/08/24 11:15 AM GMT +05:30</p> <p data-bbox="1144 1543 1318 1564">GPS Map Camera</p> <p data-bbox="626 1664 698 1698">Google</p>



B.Sc. Ag (Hons) 2nd and 3rd Year students



कोटा 28-08-2024

जानुप कुमार जार पात्राणा न दा सराम नहारा लहरा नाम रहा।

सीपीयू में गाजर घास जागरूकता सप्ताह मनाया

कोटा। सीपीयू के वृषि संकाय, राष्ट्रीय सेवा योजना द्वारा गाजर घास जागरूकता सप्ताह मनाया। उद्घाटन कर्त्तवी डॉ. सुमेत रिह ने किया। विज्ञान संकाय के सहायक प्रोफेसर डॉ. नरेन्द्र भिंडे बताया कि गाजर घास पार्श्वनयम द्विटोफोस, जिसे आमतौर पर कॉम्पैक्ट घास, स्पेन्ड ट्रॉपी, असांडी गाजरी, चटक चट्टनी नामों से जाना जाता है। कसर, अलनिया में गाजर घास उम्मलन के लिए जन-जागरूकता की। कार्यक्रम में सम्बन्धित डॉ. धर्मेन्द्र कुमार, स्टारस्सस इचार्ज डॉ. सुनील अदि उपस्थित रहे।

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Event Report on Educational Visit to HFRI Shimla and Tara Devi Hills



CAREER POINT UNIVERSITY

School of Basic & Applied Sciences, Division of Botany

Title of the Event	Educational Visit to HFRI Shimla and Tara Devi Hills
Date of the Event	25th – 26th September 2024
Introduction of the Event	<p>The educational trip to the Himalayan Forest Research Institute (HFRI), Shimla and Tara Devi Hill was organized by the Division of Botany to provide students with a hands-on learning experience, blending scientific research with the natural world. Over the course of two days, the students explored various scientific laboratories, including the Ecology Lab, Herbarium, Soil Testing Lab, and Genetics Lab, gaining insight into the role of science in understanding and conserving biodiversity. On the second day, the field trip shifted to the rich natural landscape of Tara Devi Hill, where students immersed themselves in nature, collecting and studying diverse species such as fungi, bryophytes, pteridophytes, and mushrooms. This experience offered a unique opportunity to observe and understand the delicate balance of ecosystems and the importance of biodiversity in sustaining life. The trip was designed to enhance students' practical knowledge and appreciation for environmental conservation, providing an invaluable intersection of nature, science, and curiosity.</p>
Objective of the Event (in 3-5 Bullet points OR in approx 75 words)	<ul style="list-style-type: none">• To provide students with practical exposure to scientific research and laboratory techniques through direct engagement in various scientific labs at HFRI.• To explore and appreciate the rich biodiversity of Tara Devi Hill, helping students recognize the importance of plant and fungal species in maintaining ecosystem balance.• To facilitate an in-depth understanding of ecosystems by observing and collecting specimens such as fungi, bryophytes, pteridophytes, and mushrooms, fostering skills in taxonomy and species identification.
Beneficiaries of the Event (Student / Faculty / Community etc - approx 25 words)	Students and Faculty of Division of Botany

Schedule of the Event	Date: 25th September 2024 Visit to HFRI Date: 26th September 2024 Visit to Tara Devi Hills
Brief Description of the event	<p>Day 1: Exploring Laboratories at HFRI On the first day, students visited the Himalayan Forest Research Institute (HFRI) to explore various labs and learn how science aids in understanding ecosystems.</p> <p>1. Ecology Lab: Students learned about the relationships between organisms and their environment, focusing on how biodiversity sustains ecological balance.</p> <p>2. Herbarium: They explored preserved plant specimens and gained insight into plant taxonomy and conservation. Research associates also demonstrated the digital herbarium of their Herbarium lab.</p> <p>3. Soil Testing Lab: Students explored all the instruments in the soil testing lab including Spectrophotometer, Soil Compaction Tester, Triaxial Test Apparatus and Permeameter. Students also learned how soil composition affects plant growth and ecosystem health.</p> <p>4. Genetics Lab: They explored plant genetics labs and gained insight into the working of DNA Extraction unit, Gel Electrophoretic unit and Gel Documentation system. The research associate in the lab also explained how the genetic variability experiments are being conducted in their lab and how to prepare the phylogeny and diversity analysis. students also learnt the role of genetic diversity in species conservation.</p> <p>Day 2: Fieldwork at Tara Devi Hill The second day focused on fieldwork at Tara Devi Hill, offering hands-on experience with biodiversity.</p> <p>1. Biodiversity Exploration: Students collected fungi, bryophytes, pteridophytes, and mushrooms, learning how these species support ecosystems and honing their identification skills.</p> <p>2. Ecosystem Balance: Students observed how species interact and how environmental factors affect biodiversity.</p> <p>3. Conservation Reflection: Students discussed the importance of conserving ecosystems and reflected on their role in environmental sustainability</p>

<p>Photographs (geotagged)</p> <ul style="list-style-type: none"> - 2 to 4 GeoTagged photographs of the event 	 
<p>Other Photographs (Share 2-4 selected photographs and link of directory for remaining photos)</p>	
<p>Link of Photograph Directory (google Drive)</p>	<p>https://drive.google.com/drive/folders/1-10BQo5P9wZkFTuU42MTM24Jce29RDI4?usp=drive_link</p>

News Publication (If any)	<p>करियर प्लाईट विवि के बॉटनी विभाग द्वारा दो दिवसीय शैक्षणिक विजिट हमीरपुर,(आपका फैसला)। करियर प्लाईट विद्यावाचालय के बॉटनी विभाग द्वारा दो दिवसीय शैक्षणिक विजिट किया गया। जानकारी देते हुए, विभाग की असिस्टेंट प्रो डॉ त्रिवेंका ने बताया कि विभाग द्वारा विद्यार्थियों को हिमालयन फैसले रिसर्च इंस्टीट्यूट एचएचआरआई शिमल का विजिट करवाया गया। विद्यार्थियों ने एचएचआरआई की प्रयोगशालाओं को देखा जिसमें इकोलॉजी लैब, हवारियम, मुद्रा परीक्षण प्रयोगशाला, जैनेटिक्स लैब का विजिट किया। उन्होंने तारा देवी हिल जैव विविधता का फॉलो विजिट किया जहां पर फंगस, बायोफाइट्स, टेरोडोफाइट्स और यशकम को विभिन्न प्रजातियों को एकत्रित किया। प्रयोगशालाओं और फैल्ड वर्क ने उन्हें जैव विविधता और पारिस्थितिकी तंत्र को व्यावहारिक रूप से समझने की मीका दिया। इस विजिट को करवाने का मुख्य उद्देश्य जैव विविधता और संरक्षण के प्रति व्यावहारिक ज्ञान प्रदान करना था।</p> <p>छात्रों ने किया जैनेटिक्स लैब का विजिट</p> <p>धोरां। करियर प्लाईट विश्वविद्यालय के बॉटनी विभाग द्वारा दो दिवसीय शैक्षणिक विजिट किया गया। जानकारी देते हुए विभाग की असिस्टेंट प्रोफेसर डॉ. गिरिधा ने बताया कि हिमल द्वारा विद्यार्थियों की हिमालयन कारेट रिसर्च इंस्टीट्यूट एचएचआरआई शिमल का विजिट करवाया गया। विद्यार्थियों ने एचएचआरआई की प्रयोगशालाओं को देखा जिसमें इकोलॉजी लैब, हवारियम, मुद्रा परीक्षण प्रयोगशाला, जैनेटिक्स लैब का विजिट किया। उन्होंने तारा देवी हिल जैव विविधता का फॉलो विजिट किया जहां पर फंगस, बायोफाइट्स, टेरोडोफाइट्स और यशकम को विभिन्न प्रजातियों को एकत्रित किया। प्रयोगशालाओं और फैल्ड वर्क ने उन्हें जैव विविधता और पारिस्थितिकी तंत्र को व्यावहारिक रूप से समझने की मीका दिया।</p>
Social Media post links (Youtube / Facebook / Instagrams)	<p>https://www.facebook.com/share/p/c1BfqrCEX2AKfmQe/?mibextid=CTbP7E</p> <p>https://www.facebook.com/share/p/BTLxZ9zarcvnRGk/?mibextid=CTbP7E</p> <p>https://www.facebook.com/share/p/86o7XHKDZGcGxR9R/?mibextid=CTbP7E</p>

Contribution through Research & Innovation

Career Point University (CPU) actively promotes research that aligns with **Sustainable Development Goal 15: Life on Land**, focusing on biodiversity conservation, ecosystem management, and sustainable use of natural resources. The University encourages faculty and students to undertake research projects aimed at protecting terrestrial ecosystems and restoring degraded environments.

Research at CPU explores areas such as **plant diversity, ecological restoration, invasive species management, soil conservation, and sustainable agriculture practices**. Faculty members and students from disciplines like **Botany, Biotechnology, Environmental Science, and Agriculture** conduct field studies and publish papers contributing to the understanding of ecosystem health and biodiversity protection.

The University also promotes **innovative solutions** for conserving endangered plant species, managing forest resources, and improving soil fertility through eco-friendly practices. Such initiatives strengthen environmental research capacity and provide practical models for sustainable land management.

Through these continuous research efforts, Career Point University contributes to global and national goals of **preserving biodiversity, combating desertification, and promoting sustainable ecosystems**, thereby advancing the objectives of **SDG 15 – Life on Land**.

List of Book & Chapters

Sr. No.	Name of the teacher	Title of the book published	Year of publication	ISBN number
1	Rohitashv Nagar Deepak Nagar	Problematic soil and their management	2024	978-81-972154-8-3
2	Vanita Dr. Amit Kuamr	Winged guardians a comprehensive guide to bird ecology & conservation techniques	2024	978-81-97196713
3	Dr. Teena Agrawal Anita Singh Teena Agarwal	Aspects of Lower cryptogames	2024	978-81-975859-0-6
4	Amit Kumar Dr. Vanita	Behavioural Ecology: A Comprehensive Guide	2024	978-81-976548-7-9
5	Dr. Anita Singh Dr. Teena Agarwal	The text book of fungi	2024	978-81-977692-3-8
6	Anita Singh, Meenakshi, Noopur Soni	The study on pteridophytes and paleo botany	2024	978-81-97169359
7	Prachi Sharma, Rohitashv Nagar, Deepak Nagar & Narendra Kumar Bhinda	Saline and alkaline Soil Identification & Management Strategies	2024	978-81-972154-8-3
8	Munmun Choudhary, Deepak Nagar, Rohitashv Nagar & Prakash Chand Choudhary	Soil Compaction: Cause, Impact and Remediation	2024	978-81-972154-8-3

9	Prachi Sharma, Rohitashv Nagar, Deepak Nagar & Narendra Kumar Bhinda	Soil Erosion Causes Effect and Control Measures	2024	978-81-972154-8-3
10	Raina Gocher, Deepak Nagar, Rohitashv Nagar & Prakash Chand Choudhary	Soil Pollution: Sources, Effects, and Remediation Approaches	2024	978-81-972154-8-3
11	Ms.Kriti Tripathi	Soil Chemistry	2024	978-81-97169304
12	Rohitashv Nagar, Deepak Nagar, Narendra Bhinda, Prakash Chand Choudhary	Alternative Land Utilization Approaches in Arid Regions	2024	978-81-972154-9-0
13	Dinesh Chand Meena & Maina Kumari	Ecosystem Services: Concepts and their Quantification and Valuation Approaches	2024	978-81-972154-1-4
14	Vanita	Approaches for assessing Species Richness and Diversity	2024	978-81-97196713
15	Amit Kumar	Avian Census Techniques	2024	978-81-97196713
16	Vanita	Avian Handling And Ringing	2024	978-81-97196713
17	Amit Kumar	Behaviour Biology	2024	978-81-97196713
18	Amit Kumar	Breeding Biology	2024	978-81-97196713
19	Vanita	Diet And Foraging Behavior	2024	978-81-97196713
20	Amit Kumar	Drones: Exploring Avian Ecology	2024	978-81-97196713
21	Amit Kumar	Introduction to Avian Census	2024	978-81-97196713
22	Vanita	Migration	2024	978-81-97196713
23	Amit Kumar	Acquired Behaviour	2024	978-81-976548-7-9
24	Vanita	Animal Communication	2024	978-81-976548-7-9
25	Vanita	Bird Migration and Navigation	2024	978-81-976548-7-9
26	Amit Kumar	Introduction of Animal Behaviour	2024	978-81-976548-7-9
27	Vanita	Parental Care in Animals	2024	978-81-976548-7-9
28	Amit Kumar	Reproductive behavior in Animals (Mating System & Courtship)	2024	978-81-976548-7-9
29	Vanita	Social Organization in Insects	2024	978-81-976548-7-9
30	Amit Kumar	Social organization in Primates	2024	978-81-976548-7-9
31	Amit Kumar	Stereotyped Behaviour	2024	978-81-976548-7-9
32	Vanita	Study of Animal Behaviour in Natural Habitat	2024	978-81-976548-7-9

33	Mr. Rohitashv Nagar Mr. Deepak Nagar Mr. Prakash Chand Choudhary Dr. Narendra Kumar Bhinda	Herbicides: Unveiling Environmental Consequences and Regulatory Strategies	2024	978-81-976863-7-5
34	Ayush Kr. Yogi	Technological Interventions for Biodiversity Conservation: Engineering a Balanced Ecosystem	2024	978-81-96239381
35	Dr. Anita Singh	Basidiomycota : Agicus	2024	978-81-977692-3-8
36	Dr. Anita Singh	Basidiomycotina-Puccinia	2024	978-81-977692-3-8
37	Dr. Anita Singh	Oomycetes : Albugo	2024	978-81-977692-3-8
38	Dr. Anita Singh	Zygomycota : Rhizopus	2024	978-81-977692-3-8
39	Dr. Harshita Jain	Forest Ecosystem	2024	978-81-972751-0-4
40	Mr. Rahul Kumar Ancheria	Grassland Ecosystem	2024	978-81-972751-0-4
41	Dr. Nitin Nama	Desert Ecosystem	2024	978-81-972751-0-4
42	Dr. Nitin Nama	Forest Resources	2024	978-81-972751-0-4
43	Mr. Rahul Kumar Ancheria	Land Resources	2024	978-81-972751-0-4
44	Dr. Girish Kumar Vyas	Soil Pollution	2024	978-81-972751-0-4
45	Dr. Narendra Kumar Bhinda and Mr. Prakash Chand Choudhary	Soil Erosion: Concepts, Causes and Impacts	2024	978-81-976548-8-6
46	Dr. Narendra Kumar Bhinda and Mr. Prakash Chand Choudhary	. Wind Erosion and Effective Control Measures	2024	978-81-976548-8-6
47	Dr. Chetan Kumar Nagar and Mr. Prakash Chand Choudhary	Soil Erosion Control Techniques	2024	978-81-976548-8-6
48	Dr. Chetan Kumar Nagar and Mr. Prakash Chand Choudhary	Runoff Management and Control	2024	978-81-976548-8-6
49	Mr. Prakash Chand Choudhary; Dr. Chetan Kumar Nagar and Dr. Narendra Kumar Bhinda	Sustainable Land Use Practices	2024	978-81-976548-8-6

Patent

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Patent Search

Invention Title	ROLE OF AI (ARTIFICIAL INTELLIGENCE) IN BIODIVERSITY CONSERVATION: PIONEERING SMART SOLUTIONS FOR A GREENER FUTURE		
Publication Number	16/2024		
Publication Date	19/04/2024		
Publication Type	INA		
Application Number	202411017551		
Application Filing Date	12/03/2024		
Priority Number			
Priority Country			
Priority Date			
Field Of Invention	COMPUTER SCIENCE		
Classification (IPC)	G06N002000000, C12N0015100000, G06N0005040000, G06Q0010080000, A01G0022000000		
Inventor			
Name	Address	Country	Nationality
Dr. Sandeep Kumar	Associate Professor, School of Commerce and Management, Career Point University	India	India
Dr. Harsh Gulati	Assistant Professor, Department of Zoology, School of Bioengineering & Biosciences Lovely Professional University, Punjab	India	India
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Abstract:

The present patent application pertains to the field of biodiversity conservation and, more specifically, to the utilization of artificial intelligence (AI) as a groundbreaking force in the monitoring and preservation of diverse ecosystems and species. In the age of the Anthropocene, characterized by human-induced environmental changes and a critical loss of biodiversity, innovative solutions are imperative to safeguard our planet's natural heritage. Traditional methods of biodiversity conservation, while well-intentioned, often fall short of the comprehensiveness, precision, and cost-efficiency required in the face of contemporary ecological challenges. Manual data collection, sometimes constrained by logistical difficulties and data accuracy concerns, can inadvertently delay responses to emerging threats or fail to provide the timely insights essential for preserving endangered species and their habitats. The disclosed invention, therefore, endeavors to bridge these gaps by introducing a pioneering system and method, collectively referred to as the "Smart Biodiversity Guardian."

Complete Specification

Description: The "Smart Biodiversity Guardian" is a comprehensive system that stands at the forefront of biodiversity conservation in the 21st century. Its multifaceted approach is orchestrated through four interrelated components: the Data Collection Module, the AI Analysis Module, the Decision-Making Module, and the Conservation Implementation Module. Together, they create an intelligent, dynamic, and adaptable system that orchestrates an elaborate symphony of data gathering, analysis, decision-making, and on-ground action.

The invention involves a comprehensive system for biodiversity conservation, which encompasses the following components:

Data Collection Module:

The data collection module is a critical component of the system. It acts as a digital sentinel, continuously gathering data from diverse sources. These sources may include remote sensors strategically placed in ecosystems, cameras capturing visual information, databases containing historical and environmental data, and satellite imagery offering a comprehensive view of vast areas. The data collected encompasses a wide range of variables, such as species presence, habitat characteristics, climate conditions, and potential threats.

The remote sensors play a significant role in data collection. These sensors are equipped to measure environmental parameters such as temperature, humidity, air quality, and other factors that are important for assessing habitat conditions. Additionally, cameras installed in key locations provide visual data, enabling species identification and habitat assessment. Databases are employed to access historical data, including species distribution and environmental trends, which can be crucial for evaluating changes in ecosystems. Satellite imagery offers a bird's eye view of vast areas, allowing for macro-level analysis.

AI Analysis Module:

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