REPUBLIC OF KENYA

WILDLIFE RESEARCH & TRAINING INSTITUTE

Discover Beyond

Annual Report 2024

Coordination | Innovation | Partnership | Sustainability

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DID YOU KNOW ?

Northern White Rhino

The northern white rhino (Ceratotherium simum cottoni) is one of the most endangered mammals on Earth, with only two known individuals remaining. These majestic creatures are a subspecies of the white rhinoceros and have unique features and habits that make them a marvel of nature.

Weight
1,800–2,500 kg

Length
3.7–4 meters

Habitat
East Africa

Status
CE Critically Endangered

Unique Features

Unlike their southern counterparts, northern white rhinos have a slightly hairier body, a more concave skull, and a shorter front horn. Their thick, greyish skin acts as armor, protecting them from predators and harsh environmental conditions.

Habitat Adaptation

Historically, northern white rhinos roamed across Central and East Africa, thriving in grasslands and savannah woodlands. They adapted to semi-arid environments, relying on water sources for hydration and mud baths to regulate body temperature and ward off parasites.

Gestation Period

The northern white rhino has one of the longest gestation periods among land mammals, lasting approximately 16 months. After birth, the calf stays close to its mother for up to three years, learning essential survival skills.

Feeding Habits

These rhinos are herbivores, primarily grazing on grasses. They have wide, square-shaped mouths designed to efficiently crop short grasses, making them essential in maintaining the ecological balance of their habitats.

Where They Are Found

The last two known northern white rhinos, Najin and Fatu, are currently housed at the Ol Pejeta Conservancy in Kenya. Originally, these rhinos were found in countries such as Sudan, Chad, the Central African Republic, and the Democratic Republic of Congo before poaching and habitat loss drove them to near extinction.

Contents

Message from the Board Chair

I am honoured to give the opening statement for this year's Annual Report. I take pride that this young Institution has continued to grow and expand as a centre of excellence in wildlife research and training. The achievements over the past year are commendable, giving us the impetus to aim higher in the new year. The Board continues to provide oversight and promote good governance for the Institute as guided by the Code of Conduct for State Corporations – Mwongozo.

Let me take this opportunity to warmly congratulate Dr Patrick Omondi, OGW, for his reappointment as the Director/CEO of the Institute for a second 3-year term. This followed a rigorous Board assessment process where he emerged successful and his reappointment was ratified by the leadership. The Board commits to continue working closely with the Management to advance the mission of the Institute.

During the past year, the Board made important policy decisions to guide key processes and support the Institute in delivery of its mandate. The review of the Strategic Plan 2023-2027 aligned it to the new planning guidelines issued by the guideline issued by The National Treasury and Economic Planning in support of the Bottom-up Economic Transformation Agenda. I am happy to report that this process further identified new avenues for revenue generation as the Institute repositions itself toward financial independence and sustainability.

> I take pride that this young Institution has continued to grow and expand as a centre of excellence in wildlife research and training.

The Institute's role in wildlife research and training was enhanced through several activities. There was the commencement of the second National Wildlife Census 2024/2025 in June 2024 to update the findings of the first National Wildlife Census in 2021 and give the current status of wildlife populations in space and time.

The Institute developed the National Wildlife Training Agenda from a synthesis of the training needs assessment of the wildlife sector conducted in 2023 to provide guidance to wildlife training in Kenya. The development of key institutional policies was undertaken to conform with statutory requirements and guide operations.

The Board further identified the need to strengthen the Institute's human resource capacity for enhanced service delivery and directed the review of human resource policy instruments. I am delighted to note that the institute in the last financial year received a clean audit report from the office of the Auditor General highlighting the exemplary performance of the Institute in managing public resources.

I am confident that the Institute is moving in the right direction and wish to thank the leadership of the Ministry led by the Cabinet Secretary, Hon. Rebecca Miano, EBS, and the Principal Secretary, Silvia Museiya, CBS for their continued support. I also thank the Board Directors, Management and staff of the Institute for the harmonious working relationship and support. Together we grow stronger and better.

Dr. David Nkedianye

Board Chairman

Message from the Director

It is my pleasure to once again present the Annual Report of the Institute. It is indeed an important moment for us as we look back to review the path that we have journeyed over the past one year. I am happy to report that the Institute has continued on an upward growth trajectory as a centre of excellence in wildlife research and training. The activities in the past year were oriented towards strengthening the institutional structures to support projected growth and expansion.

Towards the achievement of the Institutional core mandate of research and training, there were significant achievements. The research permitting process was streamlined by the development and launch of an IT-based system for wildlife research permitting that has been integrated with the e-Citizen while integration with the existing ERP system is ongoing. The Institute further awarded the contract for the development of the integrated National Wildlife Database from the financial support of the National Treasury.

> I am happy to report that the Institute has continued on an upward growth trajectory as a centre of excellence in wildlife research and training.

The year saw the graduation of 282 students in various diploma and certificate courses and enrolment of 411 students for various programs. There was the strengthening of the competency-based training by the securing of HELB Loans to students through the Tourism Training Revolving Fund set up by the Tourism Fund. The Institute received a donation of 50 new desktop computers by the ICT Authority as part of the Jitume Program and further engagements are continuing to upscale this for online youth employment programs.

Progress was made in ensuring a conducive environment for both staff and students. Field research activities were strengthened through construction and rehabilitation of facilities in the field research centres. Construction of the Coastal and Marine Centre in Malindi commenced in June 2024 with completion expected in early 2025. Rehabilitation works were done for other field centres including Kitale, Maasai Mara, Tsavo East, Inland waters. Other projects included the removal of asbestos, re-roofing and installation of rainwater harvesting systems in staff houses and setting-up of the water purification plant with free access to fluoride free water. The other significant undertakings are documented in the main contents of this report.

As I conclude, I recognise the support from the Ministry of Tourism and Wildlife, Board of the Institute, Management and staff. The accomplishments made during the year could not have been possible without such a dedicated team. Thank you.

Dr. Patrick Omondi, OGW

Director/CEO

The Institute at a glance

The Wildlife Research and Training Institute is a State Corporation established under Section 50 of the Wildlife Conservation and Management Act, 2013 and operationalized vide Gazette Notice No. 4862 on 17 July 2020. The Executive Order No.2 of 2023 places the Institute as a State Corporation under the Ministry of Tourism and Wildlife.

Mandate

The Institute is mandated to conduct and coordinate wildlife research and academic training in the country to enhance planning and decision making in wildlife conservation and management.

Vision

A globally competitive wildlife research and training centre.

Mission

To conduct and coordinate wildlife research and training through innovation, knowledge and technology transfer for sustainable wildlife conservation and management.

Pillars

Innovation, Partnership, Sustainability, Coordination

Board Members Profile

Dr David Nkedianye

Chair of the Board of Institute

Sylvia Museiya

Principal Secretary, State Department of Wildlife

Dr. Patrick Omondi

Director/CEO and Secretary to the Board of Institute

Mr. Francis Nkoitoi

Independent Board Member representing community and privately managed wildlife areas.

Daniel Letoiye

Independent Board Member representing community and privately managed wildlife areas

Dr Yussuf Wato

Independent Board Member representing Institutions of higher learning.

Brian Cheruiyot

Representative of Principal Secretary of the Ministry responsible for matters relating to Finance.

Margaret Kariuki

Representative of Principal Secretary Ministry responsible for matters relating to Science and Technology.

Noreen Wambui

Ex-official and representative from the Inspectorate of State Corporations

Dr. Albert Long'ora

Independent Board Member representing institutions of higher learning.

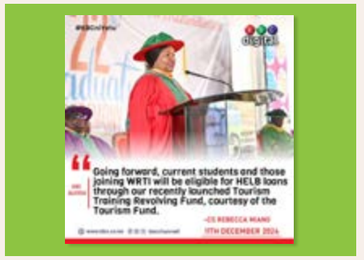
Henry Ongicho

Independent member representing persons qualified and competent in wildlife, natural resources management, biodiversity and environmental economics or related disciplines

The Year In Review

Launch of the reviewed Strategic Plan (2023-2027) by Cabinet Secretary Rebecca Miano. The Plan complies with the Government's guidelines for preparation of the fifth-generation strategic plans and aligns the Institute to ensure it delivers on its mandate.

CS Rebecca Miano inaugural visit to the Institute where she launched key projects.



New dawn for students with the introduction of the HELB loans through the Tourism Training Revolving Fund, courtesy of the Tourism Fund.

Institute received the 'Inclusive Training and Research Organisation of the Year award' during the Kenya Equality and Inclusion Awards 2024.

National Wildlife Training Agenda (2024-2033) becomes a reality. The Agenda will guide wildlife training to address prevailing needs of wildlife conservation and management in the country.

Institute received the Certificate of Registration from National Commission For Science Technology and Innovation (Nacosti) during the Multi-sectoral Conference on Science, Technology and Innovation on May 7th.

Online Research Permitting Portal launched by CS Rebecca Miano to ease the process.

Institute held 22nd Graduation where a total of 282 students graduated

Strategy and Leadership

A Bold Five-Year Vision: Institute's Strategic Plan for 2023-2027 Sets New Goals

"Through this Strategic Plan, we aim to enhance research methodologies, expand training programs, and implement conservation strategies that align with global best practices."

In a landmark event that underscored the country's commitment to sustainable wildlife conservation and management, the Institute launched its reviewed Strategic Plan (2023-2027) on October 9, 2024.

The ceremony, held at the Institute's headquarters, was officiated by the Cabinet Secretary for Tourism and Wildlife, Hon. Rebecca Miano, and by the Principal Secretary for Wildlife, Ms. Silvia Museiya.

The Strategic Plan provided a comprehensive framework to guide the Institute's efforts in generating reliable scientific data, addressing conservation challenges, and promoting evidence-based decision-making. It underscores the Institute's dedication to ensuring the sustainable management of wildlife and their habitats through innovative research, training, and community engagement.

Speaking at the launch event, Hon Miano emphasized the plan's role in strengthening research capacity and fostering collaboration with local and international stakeholders. "This Strategic Plan is a roadmap for the next phase of our journey in wildlife conservation," she noted, adding, "Through it, we aim to enhance research methodologies, expand training programs, and implement conservation strategies that align with global best practices."

The plan outlines key priority areas, including biodiversity monitoring, habitat restoration, climate adaptation, and human-wildlife coexistence. Additionally, it highlights the Institute's commitment to equipping conservationists, policymakers, and local communities with the necessary skills and knowledge to participate actively in conservation efforts.

She emphasized that research and training provide a solid bedrock for building a people centered and sustainable conservation.

"The Strategic Plan being launched today is a blueprint to guide the Institute in providing solutions to the challenges facing wildlife conservation. The bold vision of this plan 'A globally competitive wildlife research and training centre' is a reaffirmation of the commitment by the Kenya Kwanza Government and the Ministry in firmly entrenching a science-driven approach to conservation," she noted.

"This thrusts the Institute to a pole position in coordinating wildlife research and training through innovation, knowledge and technology as espoused in the mission statement. The clear statement of four guiding goals provides a defined strategic direction while the eight core values recognize our individual contribution to its delivery—a committed workforce working together to deliver on the Institute's mandate," she added.

"The clear statement of four guiding goals provides a defined strategic direction while the eight core values recognize our individual contribution to its delivery—a committed workforce working together to deliver on the Institute's mandate."

PS State Department for Wildlife Silvia Museiya congratulated the Institute, noting this was a great landmark in wildlife research and training in the country.

"I am honored to join you today at the launch of two pivotal documents that mark a new chapter in Kenya's wildlife conservation efforts—the Strategic Plan (2023-2027) and the National Wildlife Training Agenda. These two frameworks are not just crucial to the Institute but are essential to the entire conservation sector and the broader wildlife policy environment. They are transformative, timely, and provide clear, actionable strategies for managing, researching, and protecting our wildlife resources," she said.

Board Chair Dr David Nkedianye added that the reviewed Strategic Plan aligns with the Government's Bottom-up Economic Transformation Agenda (BETA) empowering the Institute to lead the way in conducting research that informs policy makers.

On his part, the Institute's Director, Dr Patrick Omondi noted that the Strategic Plan (2023-2027) is centred on key Strategic Objectives for the delivery of the desired outcomes by the expiry of the Plan period.

As the Institute continues to build on its achievements, the launch of the Strategic Plan solidifies its position as a leading institution in wildlife research and conservation. By fostering partnerships and leveraging scientific insights, the Institute remains dedicated to ensuring the long-term sustainability of Kenya's rich wildlife heritage for present and future generations.

CS Rebecca Miano inaugural visit to the Institute, launches key projects

Following her appointment, Hon. Rebecca Miano, the Cabinet Secretary for Tourism and Wildlife, made her highly anticipated first visit to the Institute on August 23rd, 2024.

This landmark visit, accompanied by Principal Secretary Ms. Silvia Museiya, marked a significant moment in the Institute's role in advancing wildlife research, Training and conservation effortsWarmly welcomed by the Board, led by Dr. David Nkendiaye, and senior management, CS Miano praised the Institute's remarkable achievements in wildlife conservation, highlighting its pivotal role in addressing the country's wildlife challenges.

"Your dedication to research and innovation is crucial to the future of Kenya's wildlife," she said, urging the Institute to strengthen partnerships and collaboration to scale up output, impact and technological advancement.

The CS also inaugurated three key infrastructure projects: the Twiga Conference Hall, the Kiboko Guest House, and a new water tank, each purposed to enhance the Institute's operational efficiency and sustainability. She launched the Institute's Online Research Permitting Portal, enhancing efficiency of the application process for researchers, and toured the Institute's tree propagation project, which she praised for having surpassed national tree-growing targets

Your dedication to research and innovation is crucial to the future of Kenya's wildlife"

Stewardship in Wildlife Research

Field Research Centers

1. Centers for Savannah, Arid and Semi-Arid ecosystem :

Driving ecosystem resilience

This Center is dedicated to advancing scientific research within the Savanna, Arid, and Semi-Arid Ecosystem (SASAE) that spans across Tsavo to Ruma, Maasai Mara to Marsabit and Amboseli to Turkana regions. The center's research focus is centered on understanding the complexities of species abundance, population dynamics, and their adaptations to the varying habitats within this ecosystem.

Studies emphasize the critical interplay between species and their environments, considering the impact of climatic variability, seasonal changes, and human activities on biodiversity. Key themes include monitoring habitat variation, assessing wildlife migration patterns, and investigating the resilience of these ecosystems to climate change and land use pressures.

Additionally, the center prioritizes the conservation of endangered species and explores sustainable management practices to mitigate human-wildlife conflict and preserve ecological integrity. By synthesizing ecological, biological, and environmental data, the Tsavo Research Center informs strategic conservation and management efforts essential for maintaining the long-term health and sustainability of the SASAE.

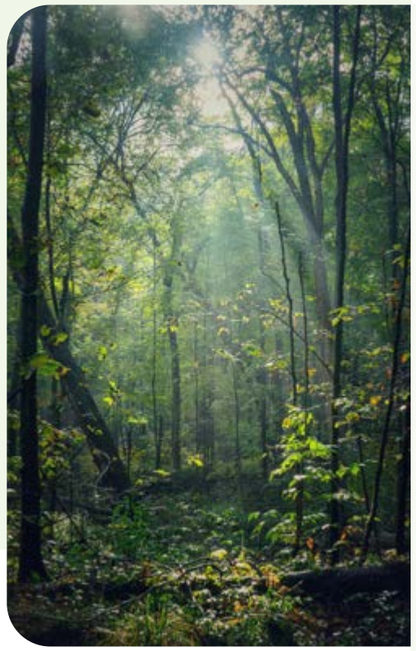
2. Center for Inland Waters and Wetlands Ecosystem

Towards long term health of fresh water ecosystems

This Center is based in Naivasha and is at the forefront of research into Kenya's inland waters, focusing on both surface and underground water systems, including lakes such as Lake Naivasha, rivers like the Mara and Tana, and critical wetlands. The center investigates water quality, availability, and the various factors that affect these vital resources, such as climate change, pollution, and land-use practices.

Additionally, it examines the biodiversity within these ecosystems, assessing the impacts of water scarcity and environmental degradation on species and habitats. The center also explores the socio-economic dimensions of water resource management, studying how local communities depend on and interact with these water systems.

By integrating research on sustainable water use, biodiversity conservation, and socio-economic factors, the Naivasha Research Center works to develop strategies that ensure the long-term health of water ecosystems while supporting sustainable livelihoods and resilience for local communities.

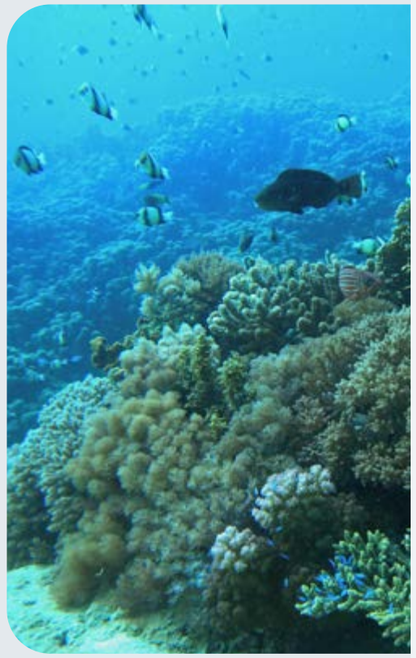


3. Center for Forest and Montane Ecosystem:

A hub to Kenya's Montane and Forest ecosystem research

This Center is based in Nyeri and is the Institute's home for research into the Montane and Forest Ecosystem in Kenya, which includes the Mau, Kakamega, Aberdares, and Mount Kenya forests. Research in this ecosystem focuses on understanding the biodiversity, distribution and trends of the unique flora and fauna that are endemic to Kenya's montane regions.

Among the most notable species is the Mountain Bongo, a critically endangered antelope found in the forests of Mount Kenya and the Aberdares. Other notable species include the Mount Kenya Lobelia, an endemic plant species at risk from habitat degradation and frequent fires. By enhancing understanding of forest biodiversity and ecosystem services, the Nyeri Research Station contributes significantly to the protection of Kenya's forest heritage and the resilience of its natural landscapes.



4. Center for Coastal and Marine Ecosystem:

Advancing marine science

This Center is based in Malindi and serves as the Institute's hub for Coastal and Marine Research, dedicated to the study and conservation of marine ecosystems. Located along Kenya's rich coastline, the Center focuses on a range of critical themes, including marine biodiversity, the sustainable utilization of coastal resources, and the protection of key species such as sharks, dugongs, sea turtles, and coral reefs.

The center engages in long-term ecological monitoring within six Marine Protected Areas (MPAs) including Kisite-Mpunguti, Diani-Chale, Mombasa, Watamu, Malindi and Kiunga MPA. Research at the Center addresses the threats posed by overfishing, habitat degradation, and climate change, while exploring strategies for mitigating these impacts.

Through collaborative partnerships with local communities, the station emphasizes co-benefits that promote sustainable livelihoods and ecosystem conservation. By providing crucial insights into marine life and its vulnerabilities, the Malindi Research Station plays a significant role in shaping effective conservation policies and fostering resilience in coastal ecosystems.

Beyond Numbers: National Wildlife Census 2024-2025

Kenya's National Wildlife Census 2024/25 is a critical and rare undertaking, one that aims to gather essential data to help guide the country's wildlife conservation efforts. The ongoing census is the second comprehensive wildlife count, following the 2021 survey, but with a new and innovative approach that promises even more accurate and insightful results.

Leading this monumental task is the Ministry of Tourism and Wildlife, through the Institute, with support from the Kenya Wildlife Service (KWS) and other conservation partners. The Ministry's leadership, under the guidance of CS, Hon. Rebecca Miano, EGH has been central to ensuring the success of the census. As one of the largest wildlife surveys in Africa, the National Wildlife Census requires careful planning, significant resources, and wide collaboration. The Ministry has stepped up to manage the logistical, financial, and technical aspects of this complex operation.

Why Count?

Without accurate and up-to-date data, it's impossible to make informed decisions on conservation strategies. The health and stability of wildlife populations depend on understanding how they are distributed, how their numbers fluctuate, and how their habitats are evolving. Counting wildlife is more than just a number—it's about gathering the information necessary to protect and manage these animals effectively.

Dr. Patrick Omondi, the Institute's Director/CEO emphasizes the importance of this initiative for the future of Kenya's wildlife: "This census is more than just a count; it's about gathering data that will shape the future of wildlife management and conservation. It is a rare, yet vital endeavor that will help us make informed decisions about protecting Kenya's diverse ecosystems and the species that rely on them."

The census was conducted through aerial surveys via both fixed-winged aircraft and helicopters. This method facilitates aerial detection of large-bodied species such as elephants, giraffes, and rhinos with minimal disruption to the animals' natural behavior.

"This census is more than just a count; it's about gathering data that will shape the future of wildlife management and conservation"

"This census is a true reflection of what we can achieve when various sectors come together. We have received tremendous support, both financially and in-kind, which has enabled us to carry out surveys in even the most remote areas. Our collective efforts will allow us to gather data that will benefit wildlife conservation for years to come."

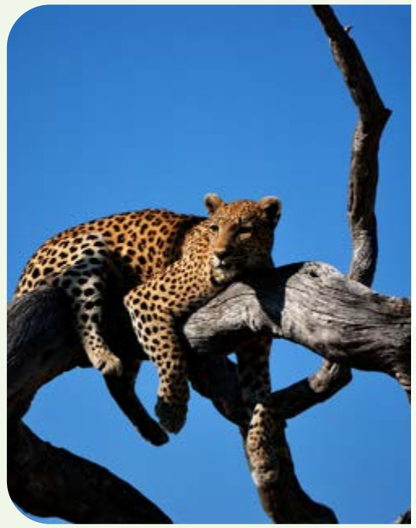
Dr. Patrick Omondi, CEO/Director

Collaboration

A project of this scale would not be possible without the collaboration of numerous stakeholders. The Ministry, through the Tourism Promotion Fund (TPF) supported the exercise as well as KWS alongside other conservation partners, including local communities, private sector contributors, and international organizations. These partnerships provide financial backing and in-kind support that is essential for carrying out aerial surveys, data analysis, and logistical operations.

A Rare but Important Endeavor

Kenya's National Wildlife Census is a rare and unique undertaking, one that places Kenya at the forefront of wildlife monitoring in Africa. While it is a costly and complex exercise, it is essential for the long-term protection and management of the country's rich biodiversity. As the survey continues into 2025, the information it gathers will help create a stronger foundation for wildlife conservation, ensuring that Kenya's wildlife remains a vital part of its natural heritage.



The Predator Info-Poop (PIP) Program in Tsavo

The Predator Info-Poop (PIP) Program, launched by the Tsavo Research Center, is an innovative initiative focused on studying the lives of predator species through the analysis of their feces (scat). The program aims to gather crucial information on predator health, diet, and behavior, which are key to advancing wildlife conservation and ecosystem management.

The PIP program utilizes a non-invasive approach to monitor predator populations. By analyzing predator scat, researchers collect information related to the health and dietary habits of species such as lions, cheetahs, and hyenas. The program combines various scientific disciplines, including ecology, parasitology, molecular biology, and morphological techniques like hair identification, to provide comprehensive insights into predator populations. For example, hair analysis can reveal the type of prey, whether it is wildlife or livestock, consumed by the predator, and thereby give an indication of the prey preference, prey availability, or patterns of livestock depredation patterns

Through this research, Tsavo scientists are using this information to assess predator-prey dynamics and the overall stability of ecosystems. In addition, the contents of predator feces, is used to monitor parasite loads, and detect potential health risks. This data is valuable for understanding how changes in the environment may impact predator populations and their prey, contributing to a more sustainable approach to ecosystem management.

This research supports the development of targeted management plans aimed at protecting predators and mitigating human-wildlife conflicts, ultimately fostering balanced ecosystems where all species can thrive.

The data generated by the PIP Program is expected to influence future conservation practices, making them more data-driven and effective in ensuring the survival of key predator species and the overall health of ecosystems.

“This research supports the development of targeted management plans aimed at protecting predators and mitigating human-wildlife conflicts, ultimately fostering balanced ecosystems where all species can thrive.”

Kenya’s First Marine Ramsar Site: A Historic Step Toward Sustainable Coastal Conservation

In a groundbreaking move for marine conservation in Kenya, the Institute, with the support of the Go Blue project under UNEP and GIZ, is spearheading the initiative to designate the first-ever Marine Ramsar site along the breathtaking Msambweni-Vanga seascape in Kwale County. This effort marks a significant milestone in the country’s environmental conservation journey, as it seeks to protect one of the most ecologically valuable coastal regions.

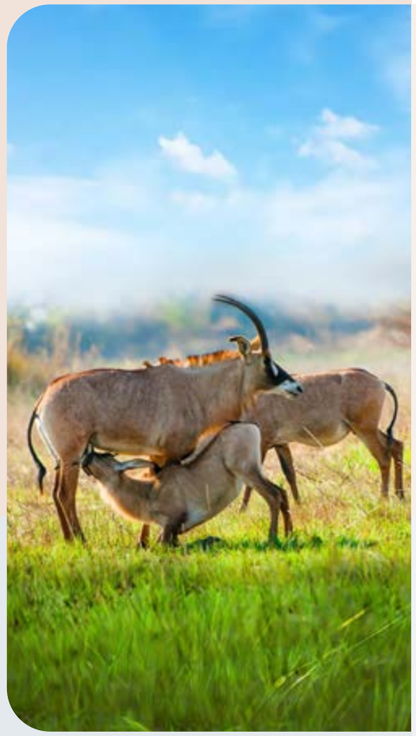
The Ramsar Convention, an international treaty aimed at the conservation and sustainable use of wetlands, has long safeguarded important freshwater sites in Kenya, from the tranquil waters of Lake Nakuru to the vibrant ecosystem of the Tana River Delta. However, the proposal to include a marine environment in this global network is unprecedented. The move seeks to preserve the delicate balance of marine life while empowering local communities to use the wetland resources wisely.

The importance of this initiative lies not only in protecting a unique ecosystem but also in its potential to balance environmental conservation with the needs of the local population. The Msambweni-Vanga seascape is a critical area for biodiversity, home to endangered sea turtles, vast seagrass beds, and vibrant coral reefs that support a wealth of marine life. The mangrove forests along the coastline serve as vital nurseries for fish and other marine species, while also providing essential ecosystem services such as coastal protection and carbon sequestration.

This site’s designation as a Ramsar site is especially important because of its co-benefits as a critical biodiversity site and source of livelihoods of local communities. Over 11 villages along the coastline depend on the seascape’s resources, from fishing to small-scale tourism. With the pressure of unsustainable practices, including overfishing and habitat degradation, there is a growing need to establish a formal conservation framework. By listing this area as a Ramsar site, Kenya not only commits to protecting these crucial resources but also ensures that future generations can continue to benefit from them in a sustainable way.

Local communities will benefit immensely from this Ramsar designation as it will encourage sustainable practices, support eco-friendly tourism, and offer protection to their livelihoods. The Msambweni-Vanga seascape’s inclusion in the Ramsar network will also promote the adoption of wise use principles—balancing development with conservation. It will encourage the government to create policies and action plans aligned with the objectives of the Ramsar Convention, fostering collaboration among local communities, conservationists, and policymakers. This partnership is key to achieving long-term environmental sustainability while empowering the people who rely on this unique ecosystem .

“This site’s designation as a Ramsar site is especially important because of its co-benefits as a critical biodiversity site and source of livelihoods of local communities”



SASAE-RETS Program: On the Watch for Kenya's Vulnerable Species in Challenging Environments

The Savanna, Arid, and Semi-Arid Ecosystem (SASAE) Rare, Endangered, and Threatened Species (RETS) Program, based at the Tsavo Research Center, is focused on conserving some of Kenya's most vulnerable species. This ambitious initiative, operating in Tsavo aims to monitor the long-term survival of endangered species such as the Roan Antelope, Grevy's zebra and Hirola.

The program employs a combination of field research, community collaboration, and advanced population monitoring techniques to collect critical data. This research is essential for developing targeted conservation strategies to support the survival and recovery of these species. Through methods such as aerial surveys, camera traps, and GPS tracking, the program is gathering valuable insights into the behavior, movement, and health of these species, which are highly vulnerable to habitat loss, competition with livestock, poaching, and environmental changes.

The research highlights the importance of maintaining key habitat resources such as water sources and grazing areas, particularly during the dry seasons. Understanding the movements and needs of these species is helping to inform more effective conservation interventions. Additionally, the program collaborates closely with local communities and conservation partners to address challenges such as habitat degradation and human-wildlife conflict, ensuring that sustainable land-use practices benefit both wildlife and people.

The SASAE-RETS Program is central to the ongoing conservation efforts in Tsavo, aiming to safeguard these rare and endangered species and their habitats for future generations .

“The program collaborates closely with local communities and conservation partners to address challenges such as habitat degradation and human-wildlife conflict...”

The Puzzle And Impact Of Rising Lake Water Levels On Biodiversity And Food Security In Naivasha, Kenya

Lake Naivasha is a lifeline for local communities, supporting fishing, agriculture, and trade. However, fluctuating water levels have severely disrupted these livelihoods. Fishing, a primary source of income, has been particularly affected by habitat degradation and declining fish stocks, leading to reduced earnings for local fishermen.

Wildlife displacement has also been a significant concern. Hippos and bird species have altered their migration patterns due to habitat changes, while increased human-wildlife conflicts have been reported as animals encroach on farmlands and settlements.

Lake Naivasha is a designated Ramsar Site, recognized for its rich biodiversity, and especially water birds and research is vital to inform decisions for policy makers.

A recent study conducted by researchers from the Institute sheds light on these challenges, emphasizing the urgent need for sustainable management strategies to mitigate the ecological and socioeconomic consequences.

The study offered a roadmap for policymakers, conservationists, and researchers to drive meaningful interventions for long-term sustainability in the phase of climate change impacts. Data collected through field observations and remote sensing analyses indicate that over 40% of key wetland areas around Lake Naivasha have been submerged in the last five years.

Addressing the impacts of rising water levels in Lake Naivasha requires an integrated approach that balances ecological conservation with socioeconomic resilience. Key recommendations include:

1. **Ecosystem Restoration**: Implementing wetland rehabilitation projects to restore critical habitats and enhance biodiversity conservation.
2. **Sustainable Fisheries Management**: Regulating fishing practices to prevent overexploitation and support fish stock recovery.
3. **Infrastructure Development**: Investing in flood mitigation structures, improved drainage systems, and early warning systems to enhance community preparedness.
4. **Livelihood Diversification**: Supporting alternative income-generating activities such as ecotourism and sustainable agriculture to reduce dependency on the lake's resources

“Over 40% of key wetland areas around Lake Naivasha have been submerged in the last five years.”

Saving Sea Turtles: Kenya's Efforts to Protect an Endangered Species

The Coastal and Marine Research Center, based in Malindi, is spearheading a dynamic data-driven and participatory approach to conserve Sea turtles. along the Kenyan coastline Sea turtles, some of the most ancient creatures on our planet, are facing an alarming decline in populations worldwide, and Kenya is no exception. All five species of sea turtles found in Kenyan waters (The green, hawksbill, olive ridley, leatherback, and loggerhead) are classified as vulnerable and targeted efforts are needed to conserve them. This classification has prompted urgent and extensive conservation efforts, with the Institute (WRTI) playing a leading role in the protection and research of these endangered animals.

The challenges faced by sea turtles are severe and varied. Habitat degradation, pollution, poaching, and overutilization of their shells, eggs, and meat are just some of the major threats that these magnificent creatures face. These pressures are compounded by social, cultural, and economic factors, which make conservation efforts even more difficult.

The Coastal and Marine Center's research on sea turtles has highlighted a critical area of focus—turtle nesting sites. Mapping and characterizing these nesting areas is essential to understanding how to protect these habitats. To tackle these challenges, the Marine Center launched a Sea Turtle Conservation Protocol formulated to standardize data collection and implementation of conservation strategies. The protocol also included digitizing and centralizing data related to turtle sightings, nesting sites, and threats, making it easier to evaluate and understand the status of sea turtle populations at any given time.

"The program collaborates closely with local communities and conservation partners to address challenges such as habitat degradation and human-wildlife conflict..."

Capacity building

The Institute recognizes that there is still much to be done. One key area that needs attention is the capacity of Turtle Conservation Groups (TCGs). These local groups, which play a crucial role in conservation efforts, need more knowledge and better data collection tools to be more effective. To address this gap, the Institute partnered the Kenya Wildlife Service (KWS), WWF-Kenya, IFAW, and several local NGOs including Bahari Hai, Local Ocean Conservation, and the Olive Ridley Project.

Together, they trained 20 Turtle Conservation Groups (TCGs) across five coastal counties—Mombasa, Kwale, Kilifi, Lamu, and Tana River—on better turtle monitoring and protection techniques. Over six days of training, the TCGs were introduced to practical methods like beach patrols, turtle tagging, nest identification, and the use of mobile apps for real-time data collection. By teaching the groups to use tools like the Survey 123 mobile data collection app, they were equipped to track and respond to turtle nesting and stranding events more effectively.

This collaboration between WRTI and local stakeholders has led to more coordinated and focused conservation efforts. With improved knowledge, tools, and data management, the TCGs are now better positioned to protect turtle nests, handle stranded turtles, and reduce illegal activities like poaching. Additionally, the digitalization and centralization of data will enable more efficient monitoring and faster decision-making.

Community Participation

One of the most important elements in the success of this initiative is public participation. The involvement of local communities and the public is crucial to the protection of sea turtles. By engaging with local stakeholders and educating the public about the importance of sea turtle conservation, WRTI and its partners hope to create a community-driven approach that supports sustainable conservation efforts.

Ultimately, this initiative is not just about saving sea turtles—it's about preserving a delicate marine ecosystem and ensuring that future generations can witness these magnificent creatures. The joint efforts of WRTI, local conservation groups, and public participation are crucial to reversing the decline of sea turtles in Kenya, giving these ancient animals a fighting chance against extinction.

Nature-Based Solutions for Thriving Communities and Ecosystems

At the Institute, we recognize that the health of our ecosystems and the well-being of communities are deeply interconnected. Our approach to conservation goes beyond protecting parks and wildlife; we embrace innovative, nature-based solutions that not only restore degraded environments but- also create sustainable livelihoods for local communities.

Through initiatives like the bamboo-based restoration project in the Nzoia River Basin, the Institute is pioneering efforts to integrate nature's potential into everyday life. By using bamboo to stabilize riverbanks, restore ecosystems, and create green jobs, we're providing communities with the tools to thrive while also safeguarding biodiversity. This holistic approach ensures that conservation efforts contribute directly to both ecological resilience and human prosperity, making it clear that healthy ecosystems and healthy communities are not mutually exclusive but are, in fact, two sides of the same coin.

For years, the Nzoia River Basin has faced severe environmental degradation. Soil erosion, deforestation, and unsustainable farming practices have ravaged the area, leaving its riverbanks exposed and communities struggling to thrive. But now, with the collaboration between the Institute (WRTI), and Jaramogi Oginga Odinga University of Science and Technology (JOOUST), and the Chinese Academy of Sciences (CAS), a solution rooted in bamboo cultivation is helping to restore the region's ecosystems and improve the lives of its people.

> **As WRTI continues its work beyond the parks, we are seeing the growing recognition that conservation isn't just about protecting wildlife in parks—it's about restoring and protecting entire ecosystems that benefit both nature and people."**

Bamboo isn't just a resilient plant—it's a game-changer for ecosystems and communities. The project launched in partnership with the United Nations Environment Programme (UNEP) focuses on using bamboo to stabilize riverbanks, restore degraded land, and provide local communities with a sustainable livelihood. Bamboo has many benefits: it grows quickly, helps prevent soil erosion, improves water retention, and sequesters carbon, contributing to Kenya's climate change goals.

Through this initiative, 2,200 bamboo seedlings were planted along the Nzoia River, and an additional 1,400 bamboo seedlings were distributed to local groups for further community-led restoration. But it didn't stop there—bamboo was intercropped with food crops like cowpeas and bananas, improving food security for farmers. In total, over 170 community members, including local leaders and officials, were trained in bamboo cultivation and management.

The Institute, a key partner in this project, has taken on a vital role in bringing this bamboo-based restoration initiative to life. Beyond its traditional focus on wildlife conservation in protected areas like national parks, the Institute has broadened its reach into landscape-level restoration efforts outside of these parks, recognizing that conservation isn't just about protecting what's inside park boundaries—it's about protecting and restoring the ecosystems that surround them.

The Institute's involvement in this bamboo restoration project isn't just about planting trees—it's about scientific research and community engagement. The institute helped establish research plots with JOOUST to monitor the ecological progress of the restoration efforts. The institute also developed a mobile-based data collection tool that tracks the socio-economic impact of bamboo farming on local communities. This data is vital for understanding how bamboo can support sustainable farming and generate income for locals while simultaneously restoring the environment.

This bamboo restoration project in the Nzoia River Basin has proven that nature-based solutions can be powerful tools for ecosystem restoration and climate resilience. The multi-stakeholder collaboration between local communities, government bodies, and international partners is what makes this project a success story, one that could be replicated across Kenya and beyond.

As the Institute continues its work beyond the parks, we are seeing the growing recognition that conservation isn't just about protecting wildlife in parks—it's about restoring and protecting entire ecosystems that benefit both nature and people. With bamboo proving to be an effective tool for ecosystem restoration, there is hope that more initiatives like this will emerge, addressing both environmental degradation and livelihood improvement in the fight against climate change.

> **As WRTI continues its work beyond the parks, we are seeing the growing recognition that conservation isn't just about protecting wildlife in parks—it's about restoring and protecting entire ecosystems that benefit both nature and people."**

Progress of Invasive species control

Taming the Invader: How Tiny Aphids Are Saving Tsavo Grassland

The invasion of *Opuntia stricta*, commonly known as the prickly pear cactus, is causing significant ecological disruption in Tsavo East National Park. The cactus spread rapidly, forming dense thickets that supplant native vegetation and adversely affect local herbivores. To address this issue, a biological control strategy involving the introduction of Dactylopius opuntiae, a cochineal aphid that specifically targets *Opuntia stricta*, is being implemented.

In light of the ecological threats posed by *Opuntia stricta*, traditional control methods, such as manual removal or chemical herbicides, are deemed inadequate and potentially harmful to the environment. Consequently, a biological control program is devised to introduce *Dactylopius opuntiae*. The methodology comprises the following steps:

The Biological Control Methodology

In light of the ecological threats posed by *Opuntia stricta*, traditional control methods, such as manual removal or chemical herbicides, are deemed inadequate and potentially harmful to the environment. Consequently, a biological control program is devised to introduce *Dactylopius opuntiae*. The methodology comprises the following steps:

1. **Controlled Environment**:
    - *Dactylopius opuntiae aphids are initially cultivated in a greenhouse where they feed on Opuntia stricta plants.*
    - *The aphids are nurtured to establish large colonies, ensuring their capability to weaken and eventually kill the cactus.*
2. **Field Implementation**:
    - Once the aphids sufficiently weaken the greenhouse-grown cactus plants, these infected specimens are carefully transferred to the field.
    - The infected plants are strategically placed in areas heavily infested with *Opuntia stricta*.
    - As the infected plants begin to wither and die, the aphids spread to nearby cacti, initiating a cycle of infestation that progressively diminishes the *Opuntia stricta* population.

The introduction of *Dactylopius opuntiae* substantially and positively impacts the park's ecosystem. As the aphids feed on the cactus, the weakened plants begin to perish, thereby creating openings in the landscape for native vegetation to regenerate. This process facilitates the restoration of grazing areas for local herbivores and enhances overall biodiversity.

To ensure the aphid population remains effective in controlling *Opuntia stricta* without causing unintended ecological imbalances, continuous monitoring is essential. Adaptive management practices are employed to adjust the biological control program as necessary, thereby ensuring its ongoing success and sustainability.

Racing Against Time: The Fight to Save the Northern White Rhino from Extinction

The goal of this ambitious project is to establish a new population of Northern White Rhinos and, eventually, to reintroduce them into the wild."

The Northern White Rhino (NWR) is a relative to the Southern White Rhino that, tragically, is now on the brink of extinction. The species once roamed freely in Southern Sudan. With only two females remaining—Najin and her daughter Fatu—the future of the Northern White Rhino hangs in the balance. These last two rhinos live at the Ol Pejeta Conservancy (OPC) in Nanyuki, Kenya, a sanctuary that was hoped to revitalize the species. But despite the best efforts to breed them, these females are unable to reproduce naturally due to reproductive health issues. The death of the last male rhinos, Suni in 2014 and Sudan in 2018, has led to the heartbreaking reality that without intervention, the Northern White Rhino could vanish forever.

However, all is not lost. A groundbreaking mission led by the BioRescue Consortium is giving the Northern White Rhino a fighting chance. This international team of scientists and conservationists is working together to save the species using some of the most advanced reproductive technologies available today. This collaborative effort involves Kenyan institutions such as the Wildlife Research and Training Institute (WRTI), Kenya Wildlife Service (KWS), and the Ol Pejeta Conservancy, alongside European partners like Zoo Dvůr Králové (ZooDK), Leibniz Institute for Zoo and Wildlife Research, Avantea Lab, University of Padua, Max Delbrück Center, and Osaka University from Japan.

The BioRescue Consortium's approach is a race against time. Since 2019, the team has been collecting eggs from the remaining females, which are then matured and fertilized using sperm from the deceased male rhinos. The result? Thirty-six Northern White Rhino embryos have been successfully produced and cryopreserved in liquid nitrogen, awaiting transfer into surrogate mothers—Southern White Rhinos, whose wombs can nurture the embryos.

But this mission is not without its challenges. In 2023, after a successful embryo transfer procedure, the first-ever pregnancy in a rhinoceros was confirmed. While the surrogate mother tragically died 70 days later from a disease, the embryo was retrieved, and DNA testing confirmed that the pregnancy was the result of the transferred embryo. This is a monumental step in the fight to save the NWR, proving that it is possible to artificially create and transfer embryos to keep the species alive. The technology is still in its infancy, and many protocols and techniques had to be designed from scratch.

The role of WRTI in this incredible mission is crucial. As a key player in this partnership, WRTI provides invaluable expertise in rhino health, behaviour and physiology."

Beyond embryo production, the BioRescue team has pioneered even more advanced technology—developing Primordial Germ Cells (PGCs) in vitro. These undifferentiated stem cells can be used to create both eggs and sperm, a process that could offer a new pathway to fertilizing and saving the Northern White Rhino. This cutting-edge method aims to increase the likelihood of successfully recovering the species.

The goal of this ambitious project is to establish a new population of Northern White Rhinos and, eventually, to reintroduce them into the wild. Achieving this requires more than just scientific innovation—it demands continued international cooperation and widespread public awareness.

The role of WRTI in this incredible mission is crucial. As a key player in this partnership, WRTI provides invaluable expertise in rhino health, behaviour and physiology. Through collaboration, innovation, and determination, there is hope that this iconic species can be saved. It is a race against time, but the fight to save the Northern White Rhino from extinction is one that must be won—for the future of our planet, and for generations to come.

Institute takes lead in tree growing and propagation efforts

“The Institute has made significant strides in its mission, successfully propagating nearly 300,000 indigenous tree seedlings across multiple nursery locations.”

As part of Kenya’s ambitious National Program for Accelerated Forestry and Rangelands Restoration, the Institute is at the forefront of a nationwide initiative aimed at planting 15 billion trees by 2032.

This large-scale, presidential directive is a critical move in the country’s battle against climate change, aiming to mitigate greenhouse gas emissions, reverse deforestation, and restore 5.1 million hectares of degraded land. The Institute plays a pivotal role in this monumental effort, driving forward both environmental conservation and ecological restoration.

At the heart of the program is the Institute’s commitment to propagating indigenous tree species, in accordance with the government’s directive. With a goal of producing 50 million indigenous tree seedlings over the next decade, the Institute is dedicated to nurturing the growth of native species that will thrive in Kenya’s diverse ecosystems. These efforts are fundamental to restoring ecosystems and enhancing biodiversity across the country.

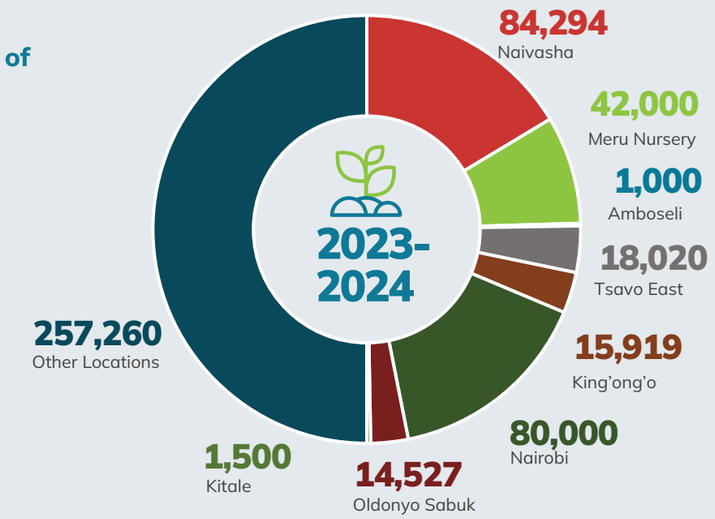
In line with Kenya’s Climate Change Act of 2016, the Institute has also established a Climate Change Unit (CCU) to support the program’s objectives. The CCU’s mandate is to develop and implement strategies that will meet the national target, ensuring the long-term sustainability of the initiative. Monitoring the progress of the seedlings post-planting is equally important, as it ensures their survival and optimal growth. Regular assessments are conducted to track the development of the saplings, ensuring that they thrive and contribute to the restoration of degraded lands.

As of 2024, the Institute has made significant strides in its mission, successfully propagating nearly 300,000 indigenous tree seedlings across multiple nursery locations. The seedlings are carefully selected to focus on species that are best suited to the local environment, ensuring their resilience and ecological value.”

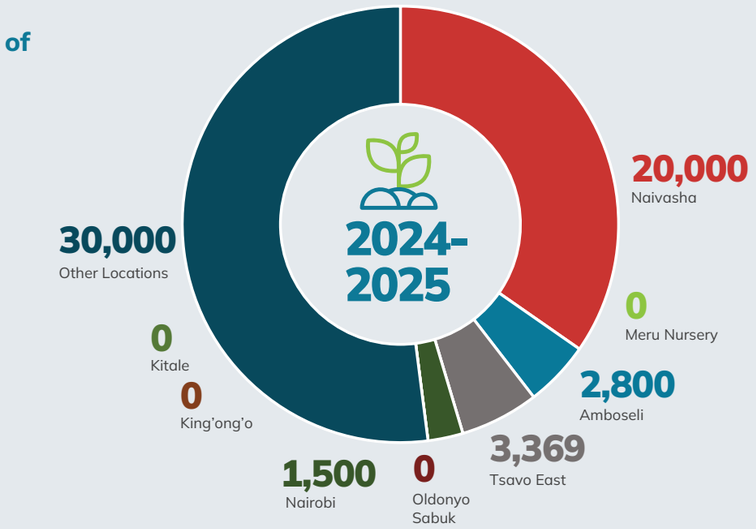
With continued progress and commitment, the Institute is poised to be a key player in shaping a greener, more sustainable future for Kenya and its people.

In numbers

Year 2023-2024 Number of Seedlings



Year 2025-2025 Number of Seedlings



At the Forefront of Conservation Science: Key Research Publications

This section highlights the diverse and multi-disciplinary research published in peer-reviewed journals. The research titles and Journals are as below:

1. Identifying Risk Factors for Stephanofilaria-Caused Ulcerative Dermal Lesions, in Black and White Rhinoceros' Meta-Population in Kenya. -**Transboundary and Emerging Diseases.**
2. Land use drives differential resource selection by African elephants in the Greater Mara Ecosystem, Kenya. **Movement Ecology.**
3. Genetic diversity of lion populations in Kenya: Evaluating past management practices and recommendations for future conservation actions. **Evolutionary Applications.**
4. Fungal endophytes from saline-adapted shrubs induce salinity stress tolerance in tomato seedlings. **FEMS microbes.**
5. Updated review of the conservation status of Nubian giraffe (Giraffa camelopardalis camelopardalis) in Kenya. **Biodiversity and Conservation.**
6. Mapping off-road tracks and animal paths in protected areas using high-resolution GeoEye-1 panchromatic satellite imagery. **International Journal of Remote Sensing.**
7. Satellite-based monitoring of the world's largest terrestrial mammal migration using deep learning. **In EGU General Assembly.**
8. Effect of ecological and anthropogenic factors on grouping patterns in African lions across Kenya. **Ecology and Evolution.**
9. Trypanosomiasis in Introduced Southern White Rhinoceros (Ceratotherium simum simum) Gifts to Ex Situ Habitat in Aitong, Kenya. **Journal of Wildlife Diseases**
10. The lion's share: implications of carnivore diet for threatened herbivores in Tsavo, Kenya. **Oryx**
11. Cooperative breeding alters physiological and behavioral responses to habitat fragmentation. **Iscience**
12. Human footprint and rainfall shape Masai giraffe's habitat suitability and connectivity in a multiple-use landscape. **Ecosphere**
13. Impact of drought and development on the effectiveness of beehive fences aselephant deterrents over 9 years in Kenya. **Conservation Science and Practice.**
14. Two decades of community based conservation yield valuable insights into marine turtle nesting ecology. **Oryx**
15. Habitat Suitability Modeling for the Invasive Opuntia stricta Using Remote Sensing and Maxent in Tsavo East National Park, Kenya. **Journal of Geography, Environment and Earth Science International**
16. Community perceptions on wildfires in Mount Kenya forest: implications for fire preparedness and community wildfire management. **Fire Ecology**
17. Heads up–Four Giraffa species have distinct cranial morphology. **PloS one.**

The Future of Wildlife: Knowledge, Skills & Innovation

Celebrating Achievement and Excellence: The 22nd Graduation Ceremony

“This 10-year strategic agenda, will guide capacity building in the wildlife sector and ensure it aligns with emerging educational and industry standards.”

On December 11, 2024, the Institute marked a significant milestone with its 22nd graduation ceremony, awarding Diplomas and Certificates to 282 trainees. The ceremony, presided over by Hon. Rebecca Miano, EGH, Cabinet Secretary of the Ministry of Tourism and Wildlife, brought together key figures in wildlife conservation and tourism, including Silvia Museiya, Principal Secretary of the State Department for Wildlife, Dr. David Nkendiaye, Chairman of the Institute’s Board, Dr. Patrick Omondi, the Institute’s Director, and various conservation partners.

CS Miano lauded the graduates as invaluable assets to the tourism and wildlife sectors. She also emphasized the Institute’s role in advancing training in fisheries, aquatic sciences, and agriculture, noting their critical impact on Micro, Small, and Medium-sized Enterprises (MSMEs). The CS highlighted the Institute’s efforts in fostering technical and vocational education and training (TVET), particularly with the development of the first-ever National Wildlife Training Agenda. This 10-year strategic agenda, she said, would guide capacity building in the wildlife sector and ensure it aligns with emerging educational and industry standards.

The CS commended the Institute for its commitment to curriculum excellence, particularly in adherence to Competency-Based Education and Training (CBET) guidelines, developed in collaboration with sector skills advisory committees.

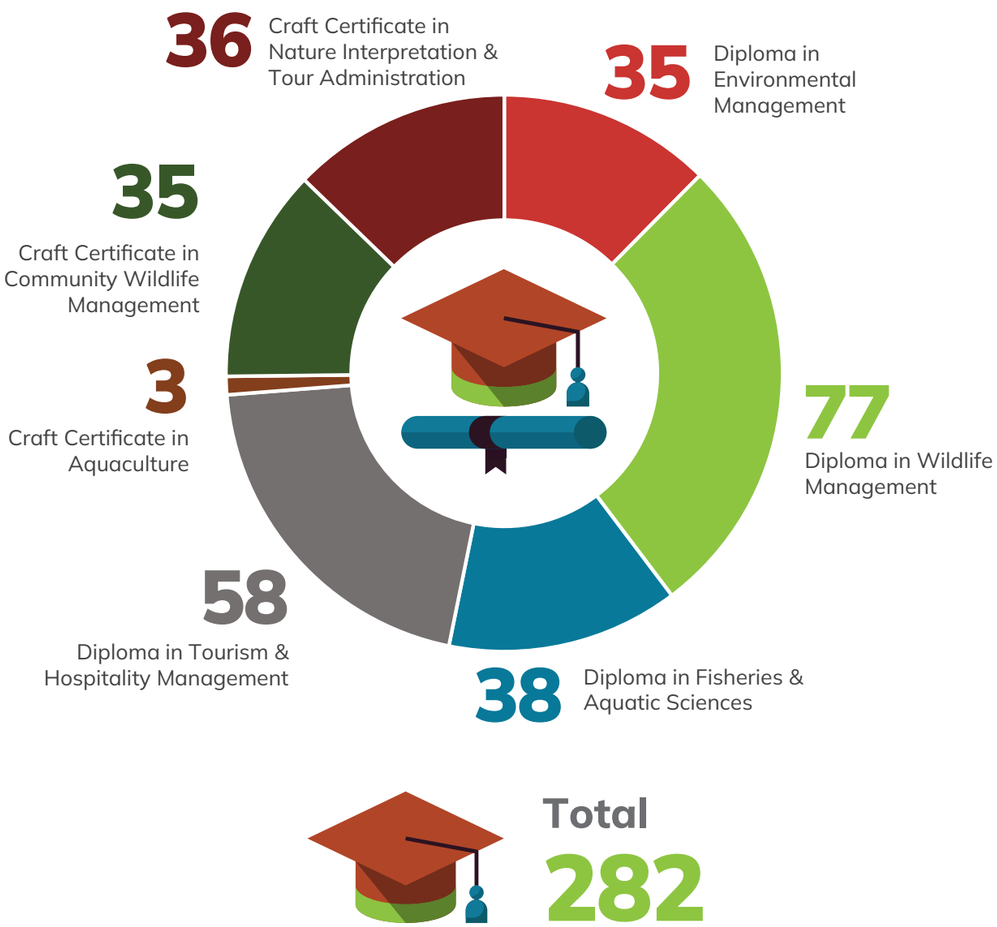
During the ceremony, special recognition was given to graduates who demonstrated exceptional performance in their programs, with awards presented by the Institute, WRTI Director/CEO, former principals, WRTI alumni, and generous sponsors such as Save the Elephant, the African Wildlife Foundation, Kenya Wildlife Service, the Kenya Association of Women in Tourism, and Enashipai Hotel.

This year’s ceremony not only celebrated the achievements of the graduates but also underscored the Institute’s pivotal role in shaping the future of wildlife conservation and tourism, ensuring a bright and impactful future for both sectors

Summary of Graduates Per Program

Best performing students of 2024

Table1: Summary of Graduates Per Program



Abdulkadir Awadh Ummu

Certificate In Aquaculture

Zipporah Gathoni Wangui

Certificate In Nature Interpretation And Tour Administration

Abdulkarim Jaicha Ali

Diploma In Fisheries And Aquatic Sciences

Spinicah Chepkoech Langat

Diploma In Wildlife Management

Amata Sellestine Esendi

Diploma In Environmental Management

Dauglas Tinina Tikoi

Certificate in Community Wildlife Management

Joy Mwitha Kibiru

Diploma In Tourism And Hospitality Management

Setting the Agenda: Kenya's First-Ever National Wildlife Training Plan

“The agenda seeks to empower trainees with knowledge and skills but also allows for innovation and use of modern technology and tools to enhance conservation and benefits from wildlife utilization.”

The Institute spearheaded the development of the Country's first-ever National Wildlife Training Agenda (2024-2033), marking a significant moment in the sector's history. This agenda, unveiled in October 2024, aims to significantly strengthen the wildlife conservation workforce, ensuring that professionals across the sector are equipped with the practical skills and knowledge needed to tackle the ever-growing challenges facing Conservation in Kenya and beyond. By aligning with national conservation goals and emerging market needs, this agenda sets the foundation for sustainable, long-term wildlife protection in the country.

Why the Training Agenda is Essential

The need for this agenda arose from a growing demand for skilled professionals who can tackle the challenges of wildlife conservation. With threats to wildlife increasing, such as habitat loss, poaching, and climate change, it's essential that the workforce is prepared to handle these issues.

For the first time, the Institute engaged multiple stakeholders, including government agencies, conservation organizations, and educational institutions, to create a unified and forward-thinking approach to wildlife training. By focusing on both national goals and emerging market needs, the agenda ensures that professionals in the field are ready to meet the demands of a rapidly changing conservation landscape.

Key Objectives of the Training Agenda

The National Wildlife Training Agenda has three primary objectives that aim to improve Kenya's wildlife conservation efforts:

1. Aligning Training Programs with National Goals

The training will be updated to ensure it aligns with Kenya's broader conservation priorities, including the National Wildlife Strategy 2030. It will also adapt to the needs of the market and the evolving demands of the wildlife sector, ensuring that professionals are prepared for current and future challenges.

2. Expanding Training Accessibility

To make sure wildlife conservation is inclusive, the agenda emphasizes expanding training opportunities to underserved communities, giving them the chance to be involved in conservation efforts. This will help develop a more diverse and capable workforce that is committed to protecting Kenya's wildlife.

3. Competency-Based, Hands-On Training

Rather than just offering theoretical education, the training programs will focus on practical skills and real-world problem-solving. This approach ensures that wildlife professionals can effectively apply their knowledge in the field and respond to challenges like wildlife poaching, habitat destruction, and illegal trade.

A Revolutionary Approach to Wildlife Training

What sets the National Wildlife Training Agenda apart from previous training programs is its focus on hands-on, real-world skills and its alignment with Kenya's conservation priorities. The agenda seeks to empower trainees with knowledge and skills but also allows for innovation and use of modern technology and tools to enhance conservation and benefits from wildlife utilization.

The agenda's development began with a Training Needs Assessment, which identified key gaps and areas for improvement in the sector. Based on these findings, the agenda was summarized into eight thematic areas that cover diverse components of sustainable wildlife conservation, management, utilization and benefits. These areas are designed to equip professionals with specialized knowledge and practical skills, helping to meet the country's urgent wildlife conservation needs.

Eight Key Areas for Training

The National Wildlife Training Agenda outlines eight priority areas to ensure a comprehensive approach to building a skilled workforce. These include:

- Wildlife and Conservation Area Management
- Environment and Natural Resource Management
- Fisheries and Aquaculture
- Tourism and Hospitality Management
- Wildlife Utilisation and Bioprospecting
- Wildlife Health, Crime, and Forensics
- Natural Resource Governance
- Nature Financing Solutions

A Long-Term Vision for Conservation

The Institute is confident and committed to this which, for the next decade, will steer capacity building of a workforce that is knowledgeable, and skilled to conserve, manage and benefit from Kenya's rich biodiversity.

"This support is a major step forward in recognizing the value of wildlife education and ensuring the sector has adequate professionals with the most relevant skills to meet emerging challenges and move the sector forward."

Funding for Wildlife Trainees

Celebrating New funding for Wildlife Trainees

In an exciting new development, students at the Institute can now apply for financial support through the Tourism Training Revolving Fund (TTRF). This move offers a tremendous opportunity for new and continuing students pursuing Training in wildlife Conservation and Management.

The TTRF offers financial help in the form of loans for various tourism-related educational programs. This initiative facilitated through the Higher Education Loans Board (HELB), will provide financial support, enabling students to focus on their studies, resulting in a greater number of graduates and contributing to the future of wildlife conservation.

This support is a major step forward in recognizing the value of wildlife education and ensuring the sector has adequate professionals with the most relevant skills to meet emerging challenges and move the sector forward.

For WRTI students, it could be the key to unlocking their full potential, allowing them to explore the wide learning opportunities in the field of conservation without the burden of financial stress. With the backing of TTRF, these students can now pursue their passion and dreams for conservation and shape a better future for our planet.

Institute's Transformative Upgrades: A Year of Modernization and Sustainability

In 2024, the Institute embarked on a transformative journey, making significant upgrades across its facilities to enhance research, training, and conservation efforts. These impactful developments were made possible through the generous funding provided by the Tourism Promotion Fund (TPF) and the Government of Kenya (GoK). Focused on improving infrastructure, fit-for-purpose facilities, embracing sustainable practices, and fostering staff welfare, these upgrades are set to elevate the Institute's capacity to drive competitive Training and Research initiatives. Here's a look at the key achievements from this year of modernization and progress.

New Head-Office: A Hub for Marine Science in Malindi

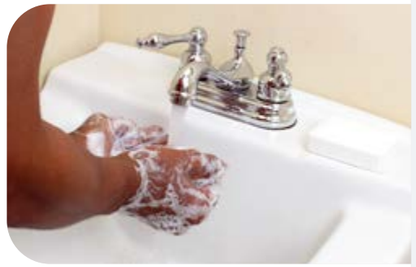
Construction for the new Head-office of the Coastal and Marine Research Center, located just 100 meters from the Malindi beachfront began early in the year. Set to be completed in 2025, this state-of-the-art facility will include specialized lab spaces, modern office areas, and a conferencing facility, designed to support cutting-edge marine research. The prime location and advanced infrastructure will provide researchers with the ideal environment to drive marine science innovation and conservation efforts, strengthening the Institute's role in protecting coastal ecosystems.

Twiga Conference Hall Construction

The Institute expanded its conference facilities with the construction of the Twiga Conference Hall, which accommodates up to 50 guests. Powered by solar lighting, the new hall offers an eco-friendly alternative while significantly reducing electricity costs.

Rehabilitation of Kiboko Guest House

The Kiboko Guest House received a major facelift, featuring top-class furniture, a gazebo, and a water fountain to create a homely and comfortable atmosphere. With modern amenities and fully solar-powered, it provides an ideal retreat for families seeking a peaceful getaway.



Boosting Water Supply for Staff and Wildlife

In a significant step towards sustainability and operational efficiency, the Institute installed a 100,000-liter galvanized steel water tank to ensure a consistent and reliable water supply for its diverse needs. Officially commissioned by Cabinet Secretary Rebecca Miano, this new water storage system serves the Institute's staff and students and also supports the wildlife sanctuary by providing a steady water source for the animals.

Enhancing Hostel Life for our Students

In a bid to provide top-notch facilities for students, the Institute has renovated the washrooms across all four hostels, ensuring a higher standard of hygiene and comfort. The upgrades not only improve the cleanliness and functionality of the facilities but also include the installation of a solar water heating system, reducing energy consumption and promoting an eco-friendly, sustainable living environment for students.

Prioritizing Staff Health and Safety: Asbestos Removal and Eco-Friendly Roof Upgrades

The Institute successfully completed Phase 1 of the asbestos removal process in staff housing, replacing the harmful material with safe, eco-friendly roofing solutions. Asbestos is known to pose serious health risks, including respiratory diseases and cancer, and this initiative highlights the Institute's commitment to safeguarding staff welfare. By eliminating these risks and adhering to NEMA regulations, the Institute ensures a healthier, safer, and more sustainable living environment in the institute and its environs.

Unlocking Potential in the Maasai Mara Research Centre

The Maasai Mara Research Sub-Center, part of the Institute's Savanna Research Centre, has been upgraded to take full advantage of its unique location. The refurbishment aimed to create a modern, high-quality workspace that not only increases research capacity but also improves the well-being of those who work in this critical hub. By offering a purpose-built facility with updated amenities, the centre is better positioned to support research, stimulate collaboration, and advance conservation efforts in one of the world's most iconic ecosystems.

Revitalizing Kitale Sub-Centre: A Modern Facelift for Improved Service and Efficiency

The Kitale Research Sub-Centre, is part of the Montane/Mountain Ecosystems Research Center, has been completely renovated, bringing its office building up to modern standards. The refurbishment focused on improving the space's, ensuring that it is more suited to its intended purpose. The refurbished office complex, with improved facilities and a streamlined design, aims to increase operational efficiency and service delivery by providing employees with a productive and comfortable atmosphere that boosts their capacity to carry out their essential work in the region.

Facility upgrades to advance Wildlife Forensics and Aquatic Research

The Institute is enhancing its capabilities in wildlife forensics and aquatic sciences by renovating two critical facilities. The Forensic Facility at the Savanna, Arid, and Semi-Arid Ecosystem Research Center in Tsavo East and the Aquatic Research Lab at the Inland Waters and Wetlands Research Center in Naivasha are undergoing upgrades. These improvements will bolster the Institute's research infrastructure, advancing both field and laboratory studies in wildlife forensics and aquatic sciences.

Expanding the Institute's Brand Footprint

The Institute made significant strides in enhancing its brand visibility showcasing its role as a leader in wildlife research, conservation, and training by actively participating in a series of high-profile events. These initiatives underscore its growing influence as a globally competitive wildlife research and training center.

Homa Bay International Investment Conference (HOBIIC): The Institute, through exhibition, engaged local stakeholders to harness diverse opinions, skills and knowledge towards enhancing conservation of the endangered Roan Antelopes during the HOBBIC. The event was presided over by HE President Dr William Ruto.

WRC Safari Rally: For the fourth running, the Institute successfully hosted Africa's largest WRC service park in Naivasha during the Safari Rally, leveraging its vast resources to manage this high-profile event. While accommodating the massive scale of the rally, the Institute guided and promoted stringent environmental standards, ensuring the event was conducted with minimal ecological impact.

NMG Higher Education Expo & Career Fair: During the Nation Media Group Higher Education Expo & Career Fair at the KICC in February-March, the Institute presented a range of career opportunities within the wildlife, tourism, and environmental sectors. Emphasizing its innovative training programs, the Institute showcased how it equips the modern workforce with the skills and knowledge necessary for success in these dynamic fields.

World Tourism Day 2024: In celebration of World Tourism Day 2024 in Kisumu City, themed "Tourism and Peace," the Institute showcased its adventure tourism activities, including the Hippo Campsite and Naivasha Wildlife Sanctuary. The exhibition highlighted the Institute's Wildlife Research and Training programs, which support sustainable tourism and career pathways in wildlife and tourism conservation.

Kenya National Research Festival: Sponsored by the National Research Fund (NRF) in August, the Institute's participation helped spread awareness about its work in wildlife conservation and the importance of research for sustainable solutions through an exhibition.

Awards and recognitions for 2024

The Institute Earns NACOSTI Accreditation: Upholding National Research Standards

In line with its mandate to ensure quality assurance in research, the National Commission for Science, Technology, and Innovation (NACOSTI) accredits research institutions to uphold high research standards in Kenya. As part of this initiative, the Institute underwent a very rigorous assessment and is proud to have earned its official accreditation from NACOSTI. This prestigious recognition was bestowed during the 3rd Multi-Sectoral Conference on Science, Technology, and Innovation held at Nairobi's Safari Park Hotel on May 7, 2024.

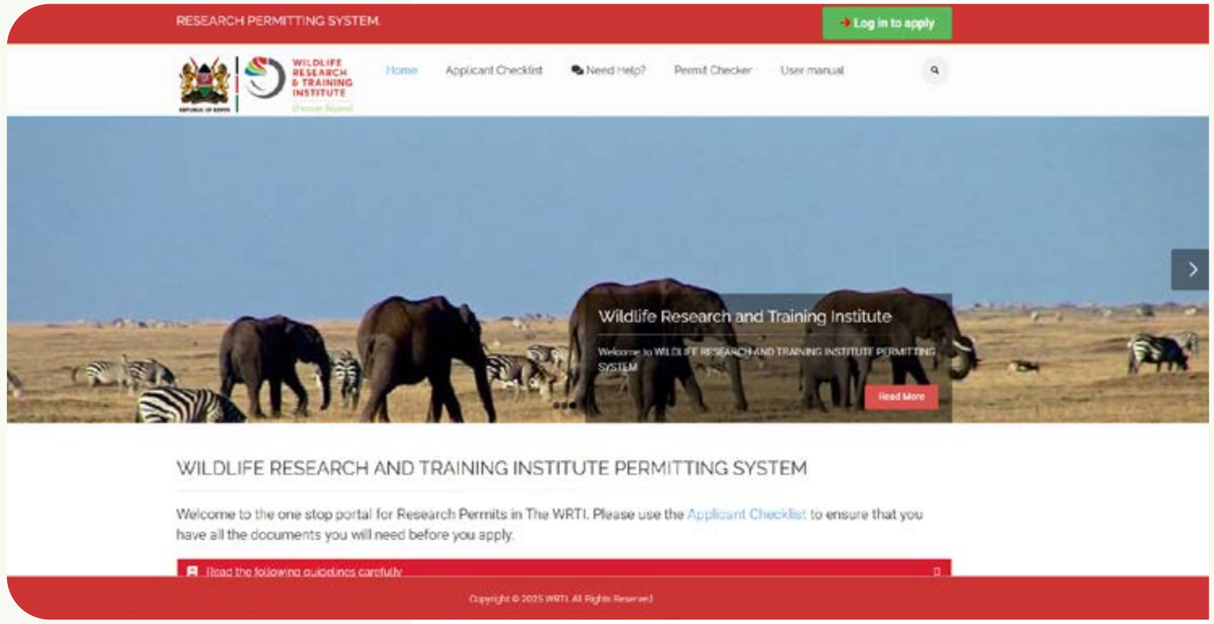
The Chair of the Institute's Board, Dr. David Nkedianye, accompanied by the Director/CEO, Dr. Patrick Omondi, received the certificate and expressed gratitude for the recognition. In his remarks, the Chair stated that this accreditation is a testament that the Institute has met the expected 'quality standards' to be effective in Wildlife Research in Kenya and can generate reliable, quality, innovative, scientific data to advance all matters in the Wildlife Sector.

Kenya Equality and Inclusion Awards 2024

At the Kenya Equality and Inclusion Awards 2024, the Institute received the top Inclusive Training and Research Organisation of the Year award, recognising its unwavering dedication to inclusivity and equality. The award event, held in December at the Boma Hotel in Nairobi, was a landmark celebration of organisations working to promote diversity and equality throughout the country.

The event, presided over by Government Spokesman Hon. Isaac Mwaura, brought together a number of prominent stakeholders working for inclusivity. Hon. Mwaura emphasized the importance of inclusivity in sustainable development, underlining the transforming influence of organizations that actively promote equal chances and welcome diversity.

The Institute was recognized for its remarkable efforts to build an inclusive environment both within its walls and outside. Its commitment to capacity building, innovative programs, accessible infrastructure, and comprehensive service delivery distinguishes it. The Institute has empowered different groups, including people with physical disabilities, through targeted training and programs, ensuring that its facilities are structured for access by all.



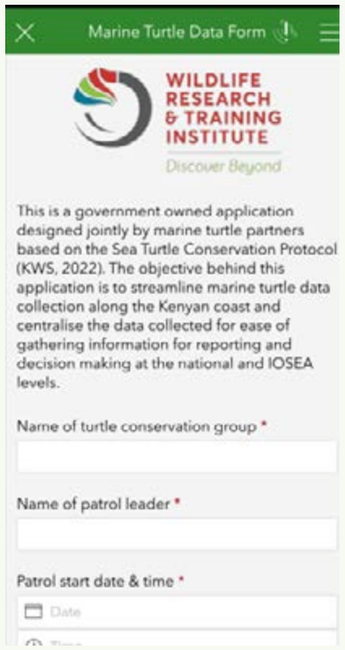
Technology Driving Efficiency

This digitalisation isn't just about saving time; it's also about making things run more smoothly."

As we reflect on the previous year at the Institute, the incorporation of technology has been central to our efforts to create a smarter, more efficient work environment. Our ongoing efforts to digitise and streamline processes resulted in demonstrable advantages in efficiency, productivity, and service delivery—critical to achieving our aim of being an internationally competitive centre for research and training.

The launch of the Online Permitting Portal was one of the most important steps in our digital transformation over the past year. It was a game changer from the old paper-based process to a completely digital system. This digitalisation isn't just about saving time; it's also about making things run more smoothly. The system has also made the whole process more efficient, with real-time tracking enhancing service delivery to researchers around the world.

Another key component of our IT-driven change was the deployment of the Enterprise Resource Planning (ERP) System, which brought our multiple functions together under a single platform. This has enabled us to streamline internal processes such as financial management, human resources, and operations, providing us with real-time data for better decision-making and operational efficiency.



We are excited to embark on this journey together and look forward to achieving great milestones through innovation, teamwork, and dedication."

Furthermore, the E-board system for Board of Directors meetings has revolutionized the conduct of meetings . By digitizing board meetings, we eliminated the need for physical documents, allowing for faster and more efficient meetings, which are critical for the timely completion of significant projects .

The E-Audit system has also significantly improved operational efficiency by adopting a paperless approach to audits that allows for more regular, real-time compliance checks. This technology has resulted in speedier reporting and accountability throughout the Institute, increasing our transparency and overall performance.

This year also saw the development of critical databases for wildlife conservation, like the Sea Turtle Database powered by ArcGIS, which has transformed the way we collect, manage, and analyze data on marine life.

One of the most forward-thinking applications of our digital transformation has been the integration of EarthRanger, a powerful tool that enables our researchers to track wildlife movements in real time. EarthRanger is an excellent tool for examining how animals use their environment, providing important insights into their movements and behaviour

Fostering Stronger Partnerships Across Borders and Sectors

The past period has been a remarkable one for us, as we have seen significant growth in our network of partners. On behalf of the entire team, the Director expresses a warm and heartfelt welcome to all our new partners.

Your commitment to collaboration and shared goals is invaluable to our collective success. We are excited to embark on this journey together and look forward to achieving great milestones through innovation, teamwork, and dedication.

Thank you for joining us. Together, we are stronger, and we are eager to make meaningful impacts in the year ahead.

Your commitment to collaboration and shared goals is invaluable to our collective success."

	WRTI and Born Free Foundation (BFF)
	WRTI and Macalester College, Minesota, U.S.A.
	WRTI and Manchester Metropolitan University (Man Met)
	WRTI and Soils for the Future Africa Ltd and Biodiversity Research Institute
	WRTI and Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences (IGSNRR-CAS) and United Nations Environment Programme- International Ecosystem Managment Partnership (UNEP-IEMP)
	WRTI and Nothern Rangelands Trust (NRT)
	WRTI and Jomo Kenyatta University of Agriculture and Technology (JKUAT)
	WRTI and CAB International (CABI)
	WRTI and Smithsonian Institution/ Smithsonian National Zoo and Conservation Biology Institute (SI/NZCBI)
	WRTI and ICU Nature Web Services EA Limited
	WRTI and East African Wild Life Society (EAWLS)

The Institute at Global Stage

“Through these platforms, we contribute to the formulation of solutions that drive positive change for biodiversity, conservation, and climate action worldwide”.

The Institute’s Active Participation in Key Environmental Conventions

The Institute continues to play a pivotal role on the global stage by actively engaging in critical environmental conventions such as the Convention on Biological Diversity (CBD), Convention on Migratory Species (CMS), United Nations Environment Assembly (UNEA), Conference of the Parties (CoP), and the International Union for Conservation of Nature (IUCN). Our participation in these esteemed forums highlights our commitment to shaping international environmental policy, fostering collaboration, and advancing sustainable practices to address global challenges. Through these platforms, we contribute to the formulation of solutions that drive positive change for biodiversity, conservation, and climate action worldwide.

1. The Convention on the Conservation of Migratory Species of Wild Animals (COP14) (CMS) held in Samarkand, Uzbekistan, from 12 to 17 February 2024.

The Institute was represented by a team led by the Director/CEO, whose participation in CMS COP14 as Kenya’s CMS National Focal Point and Chair of the Finance & Budget Sub-Committee underscores the Institute’s leading role in global conservation efforts. The conference, under the theme “Nature knows no borders,” emphasized the importance of international cooperation in protecting migratory species. This event highlighted the Institute’s active contribution to shaping policies for the conservation of migratory species and their habitats, reinforcing the need for cross-border collaborations in ensuring their survival.

2. UNEA-6 General Assembly: Advancing Multilateral Action on the Triple Planetary Crisis”

The Institute was represented by a team led by the Director/CEO at UNEA-6, held from February 26 to March 1, 2024, at the UNEP headquarters in Nairobi. This participation underscores the Institute’s commitment to driving global cooperation, innovation, and sustainable solutions for environmental protection. UNEA-6 focused on the urgent challenges of the triple planetary crisis — climate change, nature and biodiversity loss, and pollution and waste — which threaten the health of our planet. The session resulted in the adoption of 15 resolutions calling for urgent, science-backed, and politically resolved actions to address these interconnected crises. The Institute’s involvement highlights our ongoing dedication to shaping global efforts for a sustainable future.

3. IUCN Africa Conservation Congress

The Director/CEO represented the Institute at the IUCN Regional Conservation Forum (RCF) held in Nairobi, Kenya, from June 26 to 28, 2024. This forum, held every four years, is key platform for knowledge sharing, partnership building, and engagement of key stakeholders in nature and biodiversity conservation across regions. Co-organized with the National Committee of IUCN Members in Kenya and the Government of Kenya through the Ministry of Tourism and Wildlife, the event focused on evaluating conservation progress, revisiting priority goals, and proposing strategic directions for addressing Africa’s environmental and biodiversity challenges over the next 20 years. The Institute’s involvement highlights its role and position on providing evidence-based information that is critical to shaping the future of biodiversity conservation in Africa.

4. Institute’s Participation at CBD COP 16 and Related MOPs in Cali, Colombia

The Institute was represented by two officers at the 16th Meeting of the Conference of the Parties (COP 16) to the Convention on Biological Diversity, alongside the 11th Meeting of the Parties to the Cartagena Protocol on Biosafety and the fifth MOP to the Nagoya Protocol, held in Cali, Colombia, from October 16 to November 1, 2024.

Under the theme Peace with Nature, the conference focused on aligning National Biodiversity Strategies and Action Plans (NBSAPs) with the Kunming-Montreal Global Biodiversity Framework. Key discussions also addressed resource mobilization and the fair sharing of benefits from digital sequence information. The Institute made significant contributions during plenary discussions and contact group meetings, reinforcing its commitment to advancing global biodiversity goals.

Summary of financials (2023-2024)

Wildlife Research and Training Institute
Annual Report and Financial Statements
for the year ended June 30, 2024.

Statement of Financial Performance for the Year Ended 30 June 2024

DETAILS	Notes	FY 2023-24	FY 2022-23
		Kshs	Kshs
Transfers from Other Government Entities	6	537,000,000	507,000,000
Public contributions and donations	7	21,469,823	18,822,484
Fees Conference, Accommodation & Research Permits	8	138,844,846	156,758,616
		697,314,669	**682,581,100**
Revenue from exchange transactions			
Sale of goods	9	4,231,763	2,160,817
Rental Income	10	2,616,397	783,800
Finance Income	11	1,399,261	760,832
Total revenue		**705,562,090**	**686,286,549**
Expenses			
Use of goods & services	12	194,819,660	166,498,700
Employee costs	13	415,525,440	357,351,192
Board Expenses	14	17,190,889	14,637,971
Depreciation and amortization expense	15	16,911,806	2,020,455
Repairs and maintenance	16	10,338,924	17,955,536
Contracted services	17	6,161,159	13,870,056
Provision for audit fees	18	1,000,000	1,000,000
Total expenses		**661,947,879**	**573,333,910**
Other gains/(losses)			
Surplus before tax		**43,614,210**	**112,952,639**
Taxation		-	-
Surplus/(deficit) for the period		**43,614,210**	**112,952,639**
Remission to National Treasury		-	-
Net Surplus for the period		**43,614,210**	**112,952,639**

Wildlife Research and Training Institute
Annual Report and Financial Statements
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Statement of Financial Position as at 30 June 2024

DETAILS	Notes	FY 2023-24	FY 2022-23
		Kshs	Kshs
Assets			
Current assets			
Cash and cash equivalents	19	346,256,918	200,202,354.15
Current portion of receivables from exchange transactions	20	85,736,637	50,783,094.33
		431,994,188	**250,985,448.48**
Inventories	21	5,976,385	3,014,746.79
		437,970,573	**254,000,195.27**
Non-current assets			
Property, plant and equipment	22	473,832,917	217,080,530.02
Intangible assets	23	12,778,352	11,481,352.00
Total Non-Current Assets		**486,611,269**	**228,561,882.02**
Total assets		**924,581,208**	**482,562,077.29**
Liabilities			
Current liabilities			
Trade and other payables	24	79,582,888	34,126,464.37
		79,582,888	**34,126,464.37**
Non-current liabilities			
Total Non-Current Labilities		-	-
Total Liabilities		**79,582,888**	**34,126,464.37**
Reserves:			
Capital Fund - From Last Financial Year		253,020,229	61,633,950.00
Accumulated Surplus		195,415,384	82,462,745.00
Surplus for the Period		43,614,210	112,952,639.32
Capital Fund:			
'- GOK Development Grant FY 23-24		204,000,000	
- TPF Funds (Infrastructure Development - FY 23-24)		148,948,497	
- TPF Funds (Infrastructure Development - FY 22-23)		-	59,715,595.00
'- US Aid Grant (ERP)		-	10,172,061.00
Assets transfer from KWS		-	121,498,622.62
Total Reserves		**844,998,320**	**448,435,612.94**
Total Reserves and Liabilities		**924,581,208**	**482,562,077.31**

Statement of Changes in Net Assets for the year Ended 30 June 2024

Details	Retained earnings	Capital/Development Grants/Fund	Total
	Kshs	Kshs	Kshs
As at July 1, 2022	**82,462,744.68**	**61,633,950.18**	**144,096,694.86**
Surplus for the Year	**112,952,639.32**	-	**112,952,639.32**
Capital/development grants received during the year:			-
- TPF Funds (Infrastructure Development - FY 22-23)		**59,715,595.00**	**59,715,595.00**
'- US Aid Grant (ERP)		**10,172,061.00**	**10,172,061.00**
Assets transfer from KWS		**121,498,622.62**	**121,498,622.62**
As at June 30, 2023	**195,415,384.00**	**253,020,228.80**	**448,435,612.80**
As at July 1, 2023	**195,415,384.00**	**253,020,228.80**	**448,435,612.80**
Surplus for the year	43,614,210.20	-	43,614,210.20
Capital/development grants received during the year:	-	-	-
'- GOK Development Grant FY 23-24	-	204,000,000.00	204,000,000.00
- TPF Funds (Infrastructure Development - FY 23-24)	-	148,948,497.00	148,948,497.00
As at June 30, 2024	**239,029,594.20**	**605,968,725.80**	**844,998,320.00**

REPUBLIC OF KENYA

WILDLIFE RESEARCH & TRAINING INSTITUTE

Discover Beyond

CONTACT US:

P.O. Box 842-20117, Naivasha, Kenya.

+254 700 000 321, 0731 919 465.

+254-050-2020577, +2542020267

wrti@wrti.go.ke

www.wrti.go.ke