



OUR MISSION

To ensure the long-term sustenance of Northeast India's biodiversity and its ecological fabric, through scientific innovation, evidence-based ecological management and cutting-edge molecular technologies.

FACILITIES & INFRASTRUCTURE

- Biological sample processing and storage
- Forensic Photography and Documentation
- Dedicated zones for low and high quality DNA extractions
- PCR, RT PCR and electrophoresis systems with backup power
- Enzyme immunoassay facilities
- Genetic data analysis Facility

Empowering species conservation through scientific research, management solutions and forensics

ABOUT US

The Wildlife Genetics Laboratory (WGL) under the Wildlife Genetic Division (WGD) of Aaranyak is a premier facility in Northeast India dedicated to conservation genetics and wildlife forensic investigations Empowering species conservation through scientific research, management solutions and forensics.

Established in 2008, WGL is the only dedicated laboratory in the region equipped for high throughput DNA analysis of wildlife samples for research and law enforcement.

CONTACT INFORMATION

Wildlife Genetics Laboratory (WGL)

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Tracing DNA, Saving Species

WILDLIFE GENETICS LABORATORY

A Govt. Notified Laboratory for Wildlife Genetics and Forensics under Section 329(4) of the Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023



CORE AREAS OF WORK

Conservation Genetic Research

- DNA database development for key threatened species
- Genetic capture recapture population estimation
- Assessment of genetic diversity and landscape-level connectivity
- Corridor mapping & identification of Conservation Significant Units (CSUs)
- Environmental DNA (eDNA) biodiversity assessment

Wildlife Forensics

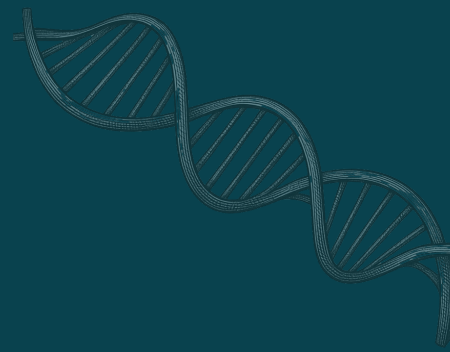
- Species identification from biological materials: blood, tissue, horn, bone, ivory, hair, feather, saliva, scales, meat (uncooked/cooked)
- Individual identification (DNA profiling) & matching of evidence to scene of crime
- Gender and parentage testing
- Identification of individual animal from seizures
- Source population assignment

Incident Response

- On-site DNA sampling assistance for wildlife crime cases
- Sample collection from government repositories
- Rapid advisory service for forest & police departments

Training & Consultation

- Field collection of DNA evidence and chain of custody protocols
- Interpretation of forensic results for legal and management purposes
- Capacity building for forest officers, academicians, researchers, and student
- Applications of DNA technology in conservation genetic research and forensic investigations



HIGHLIGHTS OF RESEARCH & CONSERVATION PROJECTS

- Tiger and Leopard Genetics: population monitoring in the protected areas of Eastern India.
- Asian Elephant Corridor Connectivity: landscape genetics across Northeast India.
- Rhino Population Genetics: dung based DNA census since 2009.
- Western Hoolock Gibbon Monitoring: stress physiology and genetic diversity mapping across Northeast India.
- Genetic Assessment of Critically Endangered White-bellied Heron.

THEMATIC FOCUS



Research



Forensics



Capacity Building & Outreach

WHY CHOOSE WGL?

<p>• Accredited expertise</p>	<p>• Proven 18+ years of track record</p>	<p>• Across 3 countries</p>	<p>• 20+ threatened species</p>
<p>• Successful 10+ years of forensics</p>	<p>• Nearly 200 wildlife crime cases resolved</p>	<p>• Secure, documented chain of custody procedures</p>	