CHUKWUEMEKA ODUMEGWU OJUKWU UNIVERSITY

POLICY ON IDENTIFICATION, MONITORING AND PROTECTION OF IUCN RED LISTED AND NATIONAL CONSERVATION-LISTED SPECIES

1. PREAMBLE

Chukwuemeka Odumegwu Ojukwu University (COOU) recognises that biological diversity is essential to ecosystem health, environmental resilience, human wellbeing, research, education and sustainable development. The University also recognises its responsibility to identify and protect species of conservation concern occurring within, or using habitats affected by, its campuses, facilities, farms, research sites, infrastructure, projects and other operations.

University activities, including land acquisition and development, construction, vegetation clearance, farming, landscaping, waste management, water abstraction, transport and research, may directly or indirectly affect plants, animals and other organisms and the habitats on which they depend. Some species may be threatened globally, nationally or locally, or may be protected under Nigerian law.

This Policy establishes a framework for identifying, monitoring and protecting species listed on the IUCN Red List of Threatened Species and applicable national conservation or protected-species lists, where such species have habitats in areas affected by the University's operations. It also provides safeguards for habitats and ecological features necessary for their survival.

The Policy shall be implemented in accordance with the laws of the Federal Republic of Nigeria, applicable Anambra State legislation, the University's enabling legislation, environmental approval conditions and other relevant institutional policies. Where a statutory requirement provides stronger protection, that requirement shall prevail.

2. PURPOSE

The purpose of this Policy is to:

a. identify IUCN Red Listed species and species appearing on applicable Nigerian national conservation, protected-species or priority-species lists that occur, or may occur, in areas affected by University operations;

b. establish a reliable baseline inventory and spatial record of such species and their habitats;

c. monitor the presence, distribution, population or occurrence trends, habitat condition and threats affecting identified species;

d. prevent, avoid, minimise and, where appropriate, restore or compensate for adverse impacts arising from University activities, in accordance with applicable law and the mitigation hierarchy;

e. protect important breeding, nesting, feeding, roosting, migration, dispersal and other ecological sites and corridors;

f. integrate biodiversity and species-conservation considerations into land-use planning, project design, procurement, construction, maintenance, research and operational decisions;

g. promote collaboration with relevant government agencies, conservation organisations, research institutions, local communities and species experts;

h. raise awareness and build the capacity of staff, students, contractors and other relevant stakeholders; and

i. establish responsibilities, reporting, record-keeping and periodic review arrangements to ensure effective implementation.

3. SCOPE

This Policy applies to all COOU campuses, satellite facilities, farms, botanical or experimental plots, research stations, field sites, water bodies, undeveloped land, green spaces and other areas owned, leased, occupied, managed or controlled by the University. It also applies to off-campus locations where University-funded, commissioned or managed activities may affect species or habitats.

The Policy applies to:

- University Management, faculties, departments, institutes, centres and administrative units;
- academic, research, technical, professional and non-academic staff, and students undertaking activities on behalf of the University;
- contractors, consultants, developers, maintenance providers, suppliers and other service providers operating on University premises or undertaking University projects; and
- projects and activities involving land clearance, construction, agriculture, landscaping, drainage, water use, waste disposal, vegetation management, field research or other activities with potential biodiversity impacts.

The Policy covers terrestrial, freshwater and other relevant habitats and species, including plants, mammals, birds, reptiles, amphibians, fish, invertebrates and fungi, where applicable. It does not imply that any particular listed species is already confirmed on COOU land. Species occurrence and conservation status shall be established through documented surveys and reliable records.

4. DEFINITIONS

- IUCN Red List: the global information source assessing the extinction risk of animal, plant and fungal species using the IUCN Red List Categories and Criteria.
- IUCN Red Listed species: a species assessed and assigned a category on the IUCN Red List, including Critically Endangered, Endangered, Vulnerable, Near Threatened, Least Concern, Data Deficient, Extinct in the Wild, Extinct or Not Evaluated, as applicable.
- Threatened species: species classified by IUCN as Critically Endangered (CR), Endangered (EN) or Vulnerable (VU).
- National conservation-listed species: a species included in a current Nigerian national, federal or state list, schedule, regulation, strategy or other officially recognised conservation instrument, including legally protected species where applicable.
- Priority species: a species identified by a competent national process, conservation authority or credible expert framework as requiring particular conservation attention, whether or not it is legally protected.

- Habitat: the natural or modified area or ecological conditions in which a species lives, feeds, breeds, rests, migrates or otherwise completes part of its life cycle.
- Area affected by University operations: land, water, airspace or ecological areas directly occupied, used, managed or influenced by University activities, including areas affected indirectly through noise, light, pollution, drainage, access, disturbance or fragmentation.
- Baseline survey: a documented assessment establishing the known or likely species occurrence, distribution, habitat condition and relevant ecological features before an activity or at the commencement of monitoring.
- Monitoring: the repeated and systematic collection of information to determine changes in species occurrence, population indicators, habitat condition, threats and the effectiveness of conservation measures.
- Mitigation hierarchy: the sequence of avoiding impacts, minimising unavoidable impacts, restoring affected areas and, only where appropriate and legally permissible, addressing residual impacts through biodiversity compensation or offsets.

5. GUIDING PRINCIPLES

a. Precautionary approach: where credible evidence indicates that a conservation-listed species may occur, the University shall take reasonable precautions until its presence or absence is assessed by competent persons.

b. Avoidance first: the University shall prioritise avoiding impacts on threatened species, protected species and critical habitats before considering mitigation or restoration.

c. Evidence-based decisions: identification, status classification and management measures shall rely on current authoritative lists, field evidence, qualified expertise and appropriately documented local knowledge.

d. Legal compliance: all activities shall comply with applicable wildlife, forestry, environmental, planning and biodiversity laws, permits and approval conditions.

e. Habitat-based conservation: protection shall consider the ecological requirements and habitats of species, not merely individual animals or plants observed during a survey.

f. Continuity and adaptive management: monitoring results shall inform adjustments to operational practices and conservation measures.

g. Participation: local communities, relevant authorities, conservation organisations and knowledgeable stakeholders shall be engaged where appropriate.

h. Transparency and accountability: surveys, decisions, mitigation actions, incidents and monitoring results shall be documented and reported.

i. Responsible information management: sensitive species-location data shall be protected from disclosure where publication could increase risks such as poaching, collection or disturbance.

6. IDENTIFICATION OF CONSERVATION-LISTED SPECIES

The University shall establish a systematic process to identify species of conservation concern in areas affected by its operations. Identification shall be undertaken before significant land-disturbing activities and periodically across existing operational areas.

6.1 Sources of species information

Species identification shall draw, as relevant, on:

- the current IUCN Red List of Threatened Species, including species accounts, distribution information, habitats, ecology, threats and conservation actions;
- applicable Nigerian national and state laws, regulations, schedules and officially recognised protected-species or conservation lists;
- national biodiversity strategies, action plans, official species inventories and conservation assessments;
- records and advice from relevant federal and Anambra State environmental, forestry, wildlife and conservation authorities;
- published scientific literature, university research, herbarium and museum records, biodiversity databases and verified citizen-science observations;
- field surveys undertaken by suitably qualified ecologists, botanists, zoologists or other relevant specialists; and
- relevant knowledge from local communities, traditional institutions, land users and conservation organisations, subject to appropriate verification.

6.2 Preliminary screening and risk assessment

Before a project or activity that may affect habitat, the responsible unit shall screen the proposed location and activity for potential biodiversity risks. Screening shall consider the nature and scale of the activity, habitat types, proximity to known species records, seasonal patterns, potential disturbance pathways and the likelihood of direct or indirect impacts.

Where screening identifies potential habitat or credible records of a conservation-listed species, the University shall commission or undertake an appropriate field assessment before approving or commencing habitat-disturbing work. Surveys shall be timed and designed to account for seasonal detectability, species behaviour and relevant ecological conditions. A single survey shall not be treated as proof of absence where the species is difficult to detect or seasonal.

6.3 Field surveys and verification

Field surveys shall be undertaken by competent personnel using methods appropriate to the species and habitat. Methods may include vegetation plots, transects, camera traps, acoustic surveys, point counts, direct observation, sign surveys, non-invasive sampling, aquatic surveys and review of existing records. Survey methods, dates, effort, weather, locations, limitations and findings shall be documented.

Species records shall, where possible, include the scientific name, common name, identification evidence, date, coordinates or mapped location, habitat, abundance or observation measure, survey method, observer and source of conservation status. Uncertain identifications shall be recorded as such and referred for expert verification.

6.4 Conservation status verification

The IUCN category and assessment date shall be checked against the current IUCN Red List record. The University shall distinguish global IUCN status from national or regional conservation status and legal protection. A species' IUCN listing does not by itself establish that the species is legally protected under Nigerian law; applicable national and state instruments shall be checked separately.

The University shall not describe a species as nationally protected or legally listed unless the relevant legal or official source has been verified. Where national conservation information is incomplete or no consolidated national Red List exists for a taxonomic group, the University shall document the authoritative sources consulted and the limitations of available information.

7. SPECIES AND HABITAT REGISTER

The designated coordinating office shall maintain a University Species and Habitat Register for conservation-listed species identified or considered likely to occur in areas affected by University operations. The register shall be updated when new survey information, list revisions, project changes or credible species records become available.

The register should include, where available:

- scientific and common names, taxonomic group and identification confidence;
- IUCN Red List category, assessment year and source link or reference;
- national or state conservation status, legal instrument and relevant schedule, where verified;
- location, habitat type, mapped area and relationship to University operations;
- survey date, method, observer, evidence and population or occurrence information;
- known ecological requirements, breeding or seasonal periods and principal threats;
- potential and actual impacts arising from University activities;
- protection, monitoring, restoration and management measures;
- responsible unit or officer, review date and outstanding actions.

Detailed coordinates for species vulnerable to collection, hunting, disturbance or illegal trade shall be stored with controlled access. Public reports may use generalised locations where disclosure could place species or habitats at risk.

8. MONITORING OF SPECIES AND HABITATS

The University shall establish a monitoring programme proportionate to the conservation status, ecological sensitivity, operational exposure and available evidence for each identified species or habitat.

8.1 Monitoring objectives

Monitoring shall assess, as appropriate, whether identified species continue to occur in affected areas, whether population or occurrence indicators are changing, whether habitats remain suitable, whether threats are increasing or decreasing, and whether conservation measures are effective.

8.2 Monitoring methods and frequency

Monitoring methods shall be species- and habitat-specific and may include repeat vegetation surveys, fixed-point photography, camera traps, acoustic monitoring, nest or roost observations, transects, water or soil quality assessment and habitat-condition scoring. The monitoring plan shall specify indicators, methods, sampling locations, frequency, responsible personnel and reporting arrangements.

As a minimum, the University shall undertake an initial baseline assessment before relevant major development or land-disturbing activities and conduct periodic follow-up monitoring. Higher-risk sites and

areas supporting Critically Endangered, Endangered, Vulnerable or legally protected species shall receive more frequent and seasonally appropriate monitoring, as determined by competent specialists.

8.3 Monitoring indicators

- continued presence or verified absence, distribution and occupancy;
- population counts, encounter rates, breeding evidence or other appropriate abundance indicators;
- extent, quality, connectivity and condition of habitat;
- evidence of disturbance, mortality, illegal collection, hunting, invasive species or other pressures;
- changes in water, soil, vegetation, noise, light or other environmental conditions relevant to the species;
- implementation and effectiveness of mitigation, restoration and management measures; and
- incidents, non-compliance and corrective actions.

8.4 Review and response

Monitoring findings shall be reviewed by the designated coordinating office and relevant specialists. Evidence of decline, habitat deterioration, new threats, unexpected species mortality or failure of mitigation measures shall trigger investigation and appropriate corrective action. Where necessary, the University shall revise operational controls, increase monitoring, restore habitat or suspend the activity responsible for the impact.

9. PROTECTION AND MANAGEMENT MEASURES

9.1 Avoidance and site planning

Where practicable, University projects shall be located or designed to avoid known important habitats and sites supporting conservation-listed species. Site plans shall incorporate ecological constraints, buffer areas, movement corridors and seasonal restrictions where recommended by competent specialists. No vegetation clearance or ground disturbance shall commence in a potentially sensitive area until the required screening, survey and approvals have been completed.

9.2 Habitat protection

The University shall protect relevant habitats from unnecessary clearance, fragmentation, drainage, pollution, uncontrolled fire, invasive species, overharvesting and other damaging activities. Important breeding, nesting, feeding, roosting and refuge areas shall be protected through appropriate access controls, signage, buffer zones or activity restrictions.

9.3 Construction and maintenance controls

Construction, landscaping and maintenance contracts shall include biodiversity protection requirements where relevant. Contractors shall receive site-specific instructions on sensitive areas, restricted activities, timing, waste control, lighting, noise, vegetation management and procedures for unexpected species encounters. Work shall stop in the affected area if a potentially listed species, nest, breeding site or previously unidentified sensitive habitat is discovered, pending assessment and direction from the responsible officer.

9.4 Species-specific safeguards

Where required by a competent assessment, safeguards may include seasonal work restrictions, protection of nesting or breeding sites, wildlife-friendly lighting, speed controls, safe crossings, retention of native

vegetation, restrictions on pesticide use, protection of water sources and prevention of human-wildlife conflict. Capture, handling, translocation or removal of protected species shall not be undertaken without all necessary expert oversight, permits and regulatory approvals.

9.5 Restoration and rehabilitation

Where University activities have degraded habitat, the responsible unit shall prepare and implement a restoration or rehabilitation plan appropriate to the ecosystem and species concerned. Measures may include restoration using suitable native species, control of invasive species, erosion control, restoration of hydrological conditions, re-establishment of habitat connectivity and long-term monitoring. Restoration shall be assessed for ecological function and species outcomes, not merely the number of trees planted.

9.6 Prohibited activities

Unless expressly authorised by applicable law and the competent authority, persons acting on behalf of the University shall not:

- deliberately kill, injure, capture, collect, possess, trade or disturb a protected or conservation-listed species;
- destroy or damage an identified nest, breeding site, roost, burrow or other critical habitat feature;
- clear or materially alter sensitive habitat without required assessment and approval;
- introduce non-native or invasive species into University-managed habitats;
- release pollutants, pesticides or waste in a manner that harms species or their habitats; or
- conceal, falsify or deliberately destroy records of species observations, mortality or habitat damage.

10. BIODIVERSITY SCREENING IN PROJECTS AND OPERATIONS

Biodiversity screening shall be integrated into the University's planning and approval processes for land acquisition, master planning, new buildings, road construction, drainage, farm development, landscaping, vegetation clearance, water abstraction, waste facilities and other activities that may affect habitats.

Where screening identifies a material risk, the University shall require an appropriate biodiversity assessment and management plan before the activity proceeds. The assessment shall describe the baseline, species and habitats of concern, impact pathways, alternatives considered, mitigation measures, residual impacts, monitoring requirements and responsibilities.

The mitigation hierarchy shall be applied in the following order: avoid impacts where possible; minimise impacts that cannot be avoided; restore affected habitats; and consider biodiversity offsets only as a last resort where legally permissible, scientifically defensible and not a substitute for protecting irreplaceable or critical habitat. No offset shall be used to justify an otherwise unlawful impact.

11. RESPONSIBILITIES

11.1 University Management

a. provide institutional leadership, resources and oversight for species and habitat conservation;

b. ensure biodiversity screening is incorporated into relevant planning, project approval and operational procedures;

c. designate an appropriate coordinating office or officer and provide access to competent ecological expertise;

d. ensure that significant risks and incidents are escalated and addressed; and

e. support collaboration with relevant conservation authorities, research institutions and external experts.

11.2 Designated Biodiversity / Environmental Management Unit

University Management shall designate an existing office or establish an appropriate coordinating function to:

a. coordinate species identification, baseline surveys, monitoring and the Species and Habitat Register;

b. maintain current reference information on IUCN and applicable national conservation lists;

c. review project screening and advise on the need for specialist assessments;

d. coordinate preparation and implementation of species and habitat management plans;

e. conduct or arrange inspections and monitor compliance with this Policy;

f. coordinate training, awareness, incident reporting and annual performance reports; and

g. liaise with relevant regulators, conservation organisations, experts and local stakeholders.

11.3 Deans, Directors, Heads of Department and Unit Heads

a. ensure activities under their control are screened for potential impacts on listed species and habitats;

b. provide relevant operational information and access for approved surveys and monitoring;

c. ensure staff, students and contractors comply with site-specific biodiversity controls;

d. report species observations, habitat disturbance, mortality and non-compliance promptly; and

e. implement corrective and restoration actions assigned to their units.

11.4 Project managers, Works and Physical Planning, and contractors

Project managers and personnel responsible for construction, maintenance, landscaping and land management shall ensure that biodiversity requirements are included in project planning, specifications, method statements and site supervision. Contractors shall comply with all approved controls and shall immediately report unexpected species encounters or habitat damage.

11.5 Academic and research staff

Researchers shall comply with this Policy when conducting fieldwork or research affecting species or habitats. Research involving collection, capture, handling, tagging, sampling or disturbance shall obtain required ethical, institutional and regulatory approvals. Research findings relevant to species conservation shall, subject to confidentiality and data-protection requirements, be shared with the coordinating office to improve the University's biodiversity records.

11.6 Students, staff and visitors

All members of the University community shall respect designated conservation areas, avoid disturbing wildlife or collecting plants and animals without authorisation, follow posted instructions and report sightings or suspected harm to conservation-listed species.

12. TRAINING, AWARENESS AND COLLABORATION

The University shall provide appropriate biodiversity awareness and training for staff, students, contractors and other relevant groups. Training may cover species recognition, habitat sensitivity, protected-species

obligations, reporting procedures, wildlife-safe working practices, invasive species prevention and emergency response.

The University may collaborate with relevant government agencies, conservation organisations, professional bodies, local communities, research institutions, botanical gardens, herbaria, museums and species experts to improve survey quality, monitoring, habitat management and conservation outcomes. Collaboration shall be conducted under appropriate institutional arrangements.

13. INCIDENT REPORTING AND CORRECTIVE ACTION

Any person who observes injury or mortality of a conservation-listed species, destruction of a nest or breeding site, unauthorised habitat clearance, pollution affecting sensitive habitat or other suspected breach shall report it promptly to the designated coordinating office or relevant unit head.

The responsible unit shall secure the affected area where necessary, prevent further harm, record the incident, obtain expert advice and notify the appropriate regulatory authority where required. Corrective measures may include stopping or modifying work, rescue or veterinary intervention by authorised specialists, habitat restoration, increased monitoring, staff retraining and review of contractor performance.

Incidents shall be investigated proportionately, with findings, responsibilities, actions and completion dates documented. Disciplinary, contractual or legal action may be taken in accordance with applicable procedures.

14. RECORD KEEPING, REPORTING AND PERFORMANCE

The coordinating office shall maintain records of surveys, species observations, status verification, maps, monitoring results, habitat assessments, permits, project screening, management plans, incidents, corrective actions, training and conservation partnerships.

An annual biodiversity report shall be prepared for the appropriate University authority. It should summarise:

- species and habitats identified, including their verified conservation status and evidence;
- survey coverage, monitoring activities and key findings;
- changes in species occurrence, population indicators and habitat condition;
- projects screened and biodiversity management plans implemented;
- incidents, impacts, compliance issues and corrective actions;
- habitat restoration and other conservation measures undertaken; and
- priorities, resource needs and recommendations for the following year.

The University may publish non-sensitive information on its biodiversity activities and conservation performance. Sensitive species-location data shall be withheld or generalised where disclosure could increase risks to the species.

15. GOVERNANCE AND OVERSIGHT

The University may assign oversight to an existing environmental sustainability, health and safety or related committee, or establish a Biodiversity and Species Conservation Committee. Membership should include relevant representation from University Management, environmental or biological sciences, agriculture, works and physical planning, research, student affairs and other relevant units.

The Committee shall:

a. review implementation of this Policy and the University's species and habitat conservation priorities;

b. consider survey and monitoring reports and recommend appropriate management responses;

c. review biodiversity risks associated with significant projects and operational changes;

d. promote coordination, training, research and collaboration;

e. review annual performance reports and recommend resource requirements; and

f. recommend amendments and improvements to the appropriate University authority.

The Committee shall not replace statutory regulators, professional ecological assessments, research ethics processes or other legally required approvals.

16. PUBLICATION AND TRANSPARENCY

This Policy shall be made publicly accessible through the University's official website and communicated to relevant faculties, departments, units, contractors and other stakeholders. The University may publish periodic summaries of its species and habitat conservation activities, monitoring outcomes and restoration initiatives, while protecting sensitive ecological information.

The University shall maintain an official version of the Policy showing the approval authority, approval date, effective date, review date, responsible office and current policy version.

17. REVIEW AND REVISION

This Policy shall be reviewed at least once every three years, or earlier where required by changes in law, conservation status assessments, national conservation lists, University operations, monitoring results or recognised scientific practice. Reviews shall consider new species records, changes in habitat condition, lessons from incidents and recommendations from relevant experts and stakeholders.

The University shall retain evidence of the review process, proposed amendments, approval of amendments, date of approval and publication of the revised Policy.

Signature:  Date: 24/10/2024

Prof. Kate Azuka Omenugha, Fnipr
Vice Chancellor

APPENDIX I: SPECIES AND HABITAT REGISTER – MINIMUM DATA FIELDS

The following fields should be used to record each species of conservation concern identified within or near areas affected by University operations:

Species (scientific name)	IUCN status / date	National status / legal source	Location / habitat	Evidence / survey date	Threats / actions

APPENDIX II: PRE-ACTIVITY BIODIVERSITY SCREENING CHECKLIST

- Has the proposed site or area of influence been identified and mapped?
- Have current IUCN Red List and applicable national/state conservation sources been checked?
- Are there known or potential conservation-listed species or sensitive habitats in or near the site?
- Is a specialist field survey required, and has it been completed at an appropriate season?
- Have alternatives been considered to avoid impacts on important habitats and species?
- Are buffer zones, timing restrictions, construction controls or other mitigation measures required?
- Have required permits, approvals and expert advice been obtained?
- Are monitoring, incident reporting, restoration and responsibility arrangements documented?

APPENDIX III: IMPLEMENTATION NOTE

Following approval, University Management should designate the coordinating office, identify biodiversity focal persons in relevant faculties and units, commission an initial biodiversity screening and baseline survey of University-controlled sites, establish the Species and Habitat Register, map sensitive habitats, and develop site-specific monitoring and management plans. Baseline work should be prioritised for areas scheduled for construction, clearance, agricultural development or other activities with potential ecological impacts. No species should be reported as present on a COOU site without verifiable evidence.

REFERENCES AND REFERENCE FRAMEWORK

- IUCN. The IUCN Red List of Threatened Species. Species accounts, categories, criteria and supporting information. https://www.iucnredlist.org/

- IUCN. Guidelines for Using the IUCN Red List Categories and Criteria, Version 16 (March 2024). https://nrl.iucnredlist.org/resources/redlistguidelines
- IUCN. IUCN Red List Categories and Criteria, Version 3.1, Second Edition. https://nrl.iucnredlist.org/resources/categories-and-criteria
- IUCN SSC Nigeria Species Specialist Group. Nigeria's Priority Species List and related national conservation resources. https://iucnsscnigeriassg.org/nigerias-priority-species-list/
- National Environmental (Protection of Endangered Species in International Trade) Regulations, 2011, and other applicable Nigerian wildlife, forestry, environmental and biodiversity legislation, as amended or replaced.