



Conservation and ecosystem services of sacred natural sites in Nigeria

Israel Borokini
Department of Biology
University of Nevada, Reno

2018 ACES Fellow

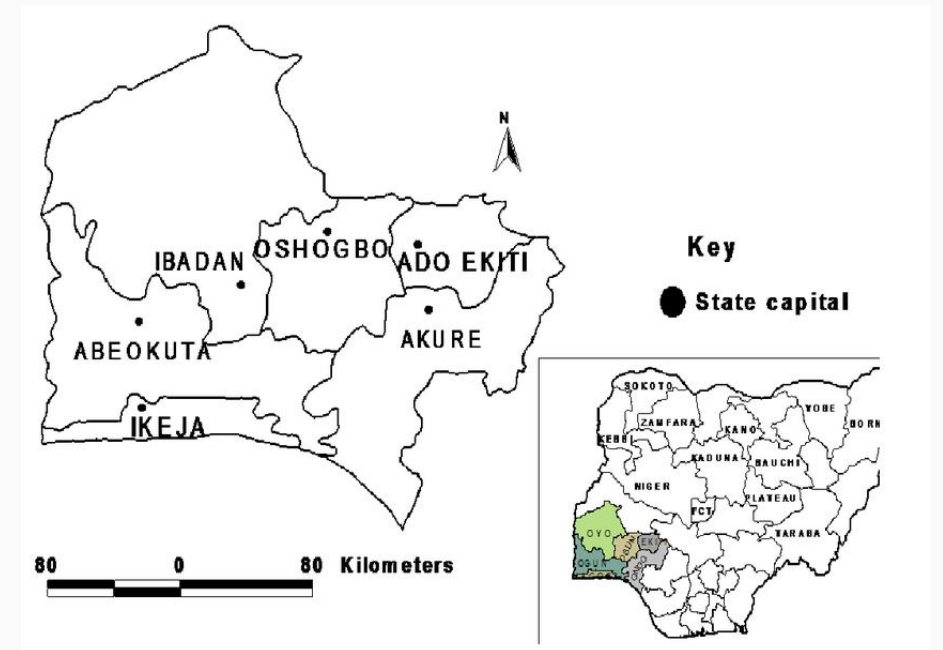
Introduction

- Southwest – Yoruba
- Southeast – Ibo tribes
- Yoruba descendants in South and Central America, and West Africa



Methods

- Data collection
 - Questionnaire administration
 - Days of recorded conversations and interviews
- Multistage sampling
 - Elderly people (> 60 years old)
 - Detailed cultural knowledge
 - Sampled within southwestern Nigeria
 - Sample size n = 25



- Part of a multiyear studies on documentation of traditional and ethnomedicinal knowledge in Ibadan, Nigeria

Descriptive data analysis

- Sacred sites mentioned by ≥ 5 respondents were listed
 - Aesthetic and cultural uses
 - Conservation status and values
 - Threats

Sacred natural sites in Nigeria

- **Sacred trees**
- Sacred groves and forests
- Sacred mountains
- Sacred waters



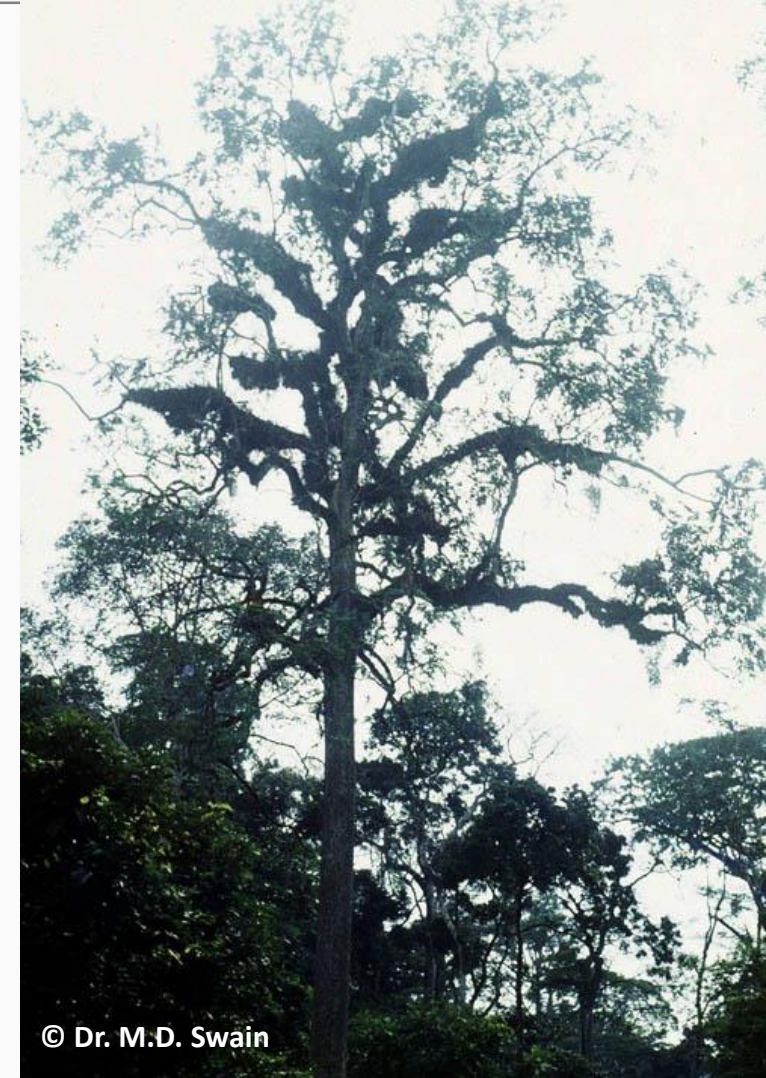
Sacred natural sites in Nigeria

- **Sacred trees**
 - ***Milicia excelsa***
 - *Many people believe this tree inhabits spirits*
 - *The tree is used for charms and magic*
 - *Rituals are made under the tree*
 - *Some respondents noted that the tree naturally regenerates itself*



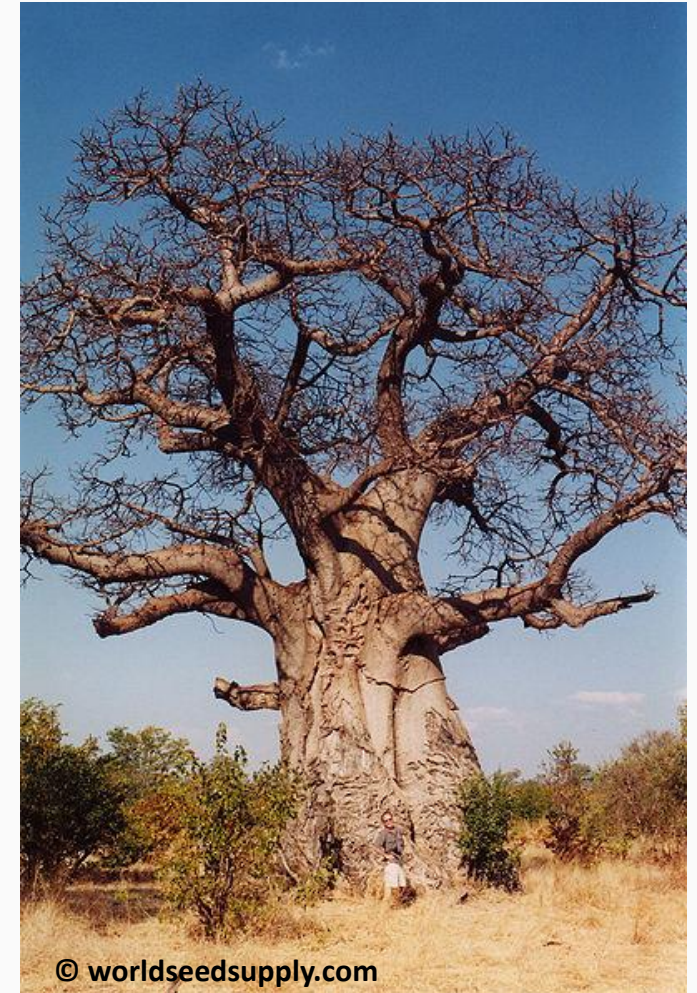
Sacred natural sites in Nigeria

- **Sacred trees**
 - ***Okoubaka aubrevillei***
 - *The largest parasitic tree in the world*
 - *Prevents other trees from growing next to it*
 - *Fewer than 100 stands globally*
 - *Revered and worshipped in entire Nigeria*
 - *Believed to be the only tree never struck by lightning*



Sacred natural sites in Nigeria

- Sacred trees
 - ***Adansonia digitata***
 - *Noted throughout Yoruba tribe as fertility tree*
 - *Center of worship in some locations, especially for barren couples*



Sacred natural sites in Nigeria

- **Other notable sacred trees**

- *Ficus thonningii*
- *Dioscorea rotundata*
- *Newbouldia laevis*
- *Ceiba petandra*
- *Cola nitida*
- *Garcinia kola*
- *Dacryodes edulis*



Sacred natural sites in Nigeria

- Sacred trees
- **Sacred groves and forests**
- Sacred mountains
- Sacred waters

Sacred natural sites in Nigeria



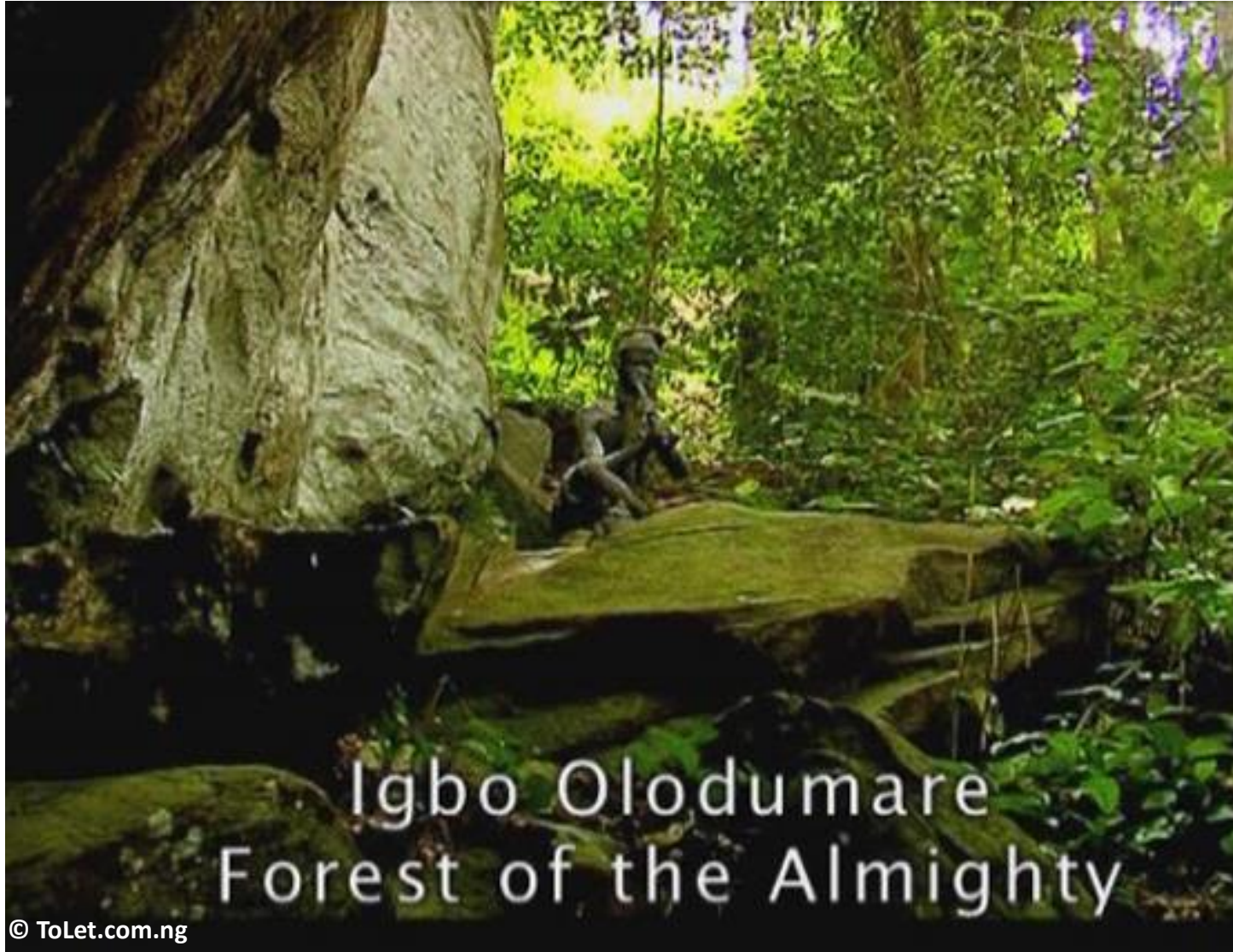
© Wikimedia commons

- **Sacred groves and forests**
 - Almost every community in southern Nigeria has sacred groves
 - Home for gods of the land, demons, ancestral spirits, spirits of demised Kings and warriors
 - Burial sites of legendary Kings of old
 - Sites for significant rituals
 - Guarded by traditional chiefs, hunters, and cult leaders
 - Examples include: Osun shrine and grove...



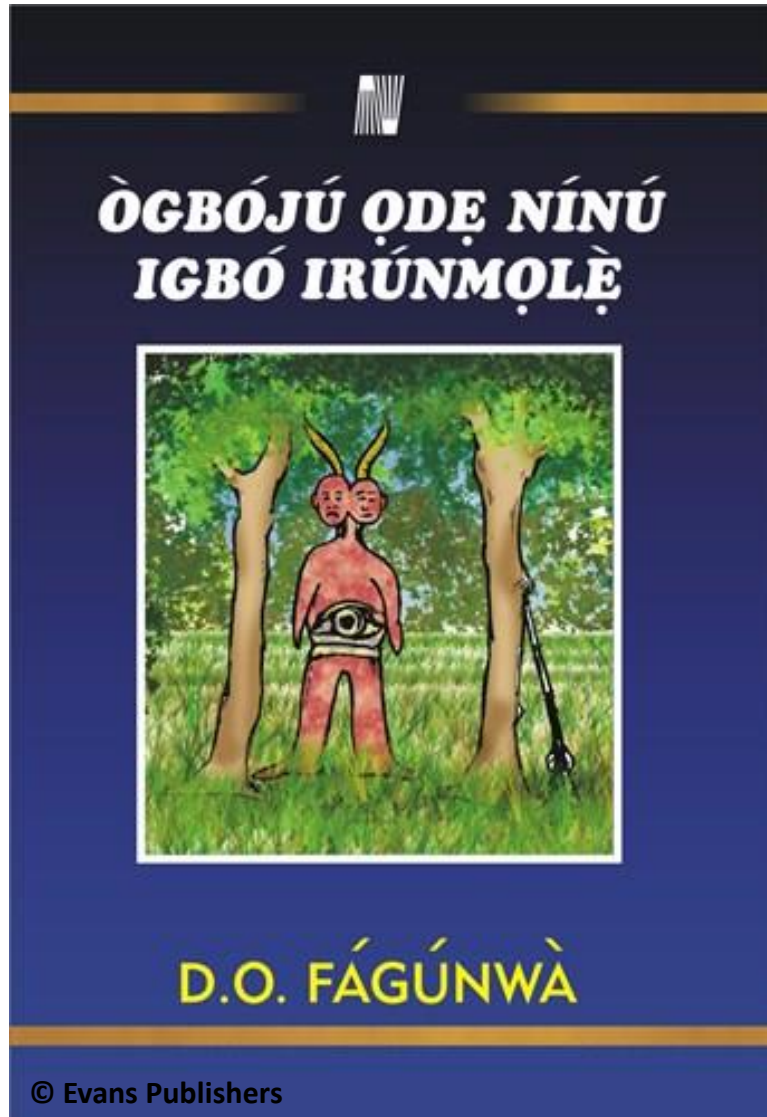
Sacred groves

Igbo Oroo (Oroo deity forest)



Sacred groves

Igbo Olodumare
(God's forest)



Sacred natural sites in Nigeria

- **Other sacred groves**
 - *Igbo Oba* (King's forest)
 - *Igbo so'ro* (evil forest)
 - *Igbo egbe* (forest of sorrow)
 - *Igbo erin* (elephant's forest)
 - *Igbo ode* (hunter's forest)
 - *Igbo erin* (buffalo's forest)
 - *Ajofia Okija* forest
 - *Igbo Irunmole* (Irunmole deity's forest)

Sacred natural sites in Nigeria

- Sacred trees
- Sacred groves and forests
- **Sacred mountains**
- Sacred waters

Sacred natural sites in Nigeria

Sacred mountains

- There are few traditional sacred mountains in southwestern Nigeria
- Examples are Oke'Ibadan hill



© The Guardian Newspaper



Sacred natural sites in Nigeria

Sacred mountains

- Olumo Rock, revered by people in Abeokuta for saving them during war

Sacred natural sites in Nigeria

Sacred mountains

- Giant human footprint on a sacred hill





© Pulse.ng

Sacred natural sites in Nigeria

Sacred mountains

- Awhum waterfall and caves



© Vanguard Newspaper

Sacred natural sites in Nigeria

Sacred mountains

- Monoliths (rocks)



Sacred natural sites in Nigeria

Sacred mountains

- Ishage Rock, Oke Ado Mountains



© Guardian Newspaper

Sacred natural sites in Nigeria

Prayer mountains (*"Ori oke"*)

- Volcanic and granitic rocks and inselbergs used by some Christian sects for prayer meetings



Sacred natural sites in Nigeria

Prayer mountains

- Oke Maria, owned by the Roman Catholic church
- Several hundreds of prayer mountains across southern Nigeria

Sacred natural sites in Nigeria

- Sacred trees
- Sacred groves and forests
- Sacred mountains
- **Sacred waters**



Sacred natural sites in Nigeria

Sacred waters

- Most surface waters in Nigeria, including the Atlantic ocean, are considered sacred
- Osun river and its worshippers



Sacred natural sites in Nigeria

Sacred waters

- Sacred waters are believed to be the homes of water spirits, marine spirits, water goddesses
- Mostly known as *Yemoja* (mother of fishes) or *Olokun* (Queen of the Sea)
- Worshiped as god of fertility, wealth and power
- Pictured as mermaid or simply as a woman

Panic spreads in Zimbabwe as residents claim they've been brutally assaulted... by mermaids

thesun

25th January 2016, 1:25 pm | Updated: 6th April 2016, 11:41 am

MANY residents in Zimbabwe are living in fear after a number of them claim to have had nasty encounters with two mermaids – a male and a female.

Apparently, the two mermaids residing in a small river in Chikanga, Mutare near Chikanga Primary School, often appear as real mermaids, fish or a huge snake.

Are mermaids real?

Sacred natural sites in Nigeria

Sacred waters

Major sacred rivers in southwest:
Niger, Osun, Ogunpa, Oba, Ose,
Owena, Ogun...

Southeast: Obi Pond, Imo River,
Abua Lake, Atochi stream, Oguta
Lake...





© Jesse Hathaway/Pinterest

Sacred natural sites in Nigeria

- *Olokun* goddess original brass monument unearthed in Olokun grove, Ile-Ife, Nigeria

Sacred natural sites in Nigeria

Sacred waters

Water goddess in Imo River, southeastern Nigeria is known as Imo Mmiri



© Enroute.ng/Tumblr



© Titi's Wanderlust

Sacred natural sites in Nigeria

Sacred waters

- Iyake suspended lake on Oke-Ado Mountains

Aesthetic and cultural values of sacred natural sites

- Ecotourist sites and some are listed as UNESCO heritage sites
- Cities and streets are named after sacred trees and rivers
- Protected by traditional laws, “taboos”, enforced by traditional law enforcers and cult groups
- Place of traditional worship and ritual-based traditional healing
- Sites of cultural and biological heritage
- Source of plant and animal resources for traditional medicine

Conservation values of sacred sites



Some of the sacred forests hold important relic biodiversity



Sacred trees are important part of urban forestry



Sacred trees are integral to agroforestry

Threats to sacred sites

Overexploitation

Erosion of cultural and religious values

Policy issues – Land Use Act 2007

Science and education

Desecration of sites by police search

Recommended actions



POLICY AND LAW



MANAGEMENT
STRATEGIES



RESEARCH

Okoubaka Aubrevillei (Pelleg & Norman): A Synthesis
of Existing Knowledge for Research and Conservation in
West and Central Africa

Temitope Israel Borokini^{1,2}

¹Plant Genetic Resources Unit, National Center for Genetic Resources and Biotechnology
(NACGRAB), Ibadan, Nigeria

²Program in Ecology, Evolution and Conservation Biology, College of Science, University of
Nevada Reno, Reno NV 89557-0314.

E-mail: tbisrael@gmail.com

Sanctuary of the Spirits and SNS, Nigeria

Sanctuary of the Spirits: *Okwu-muo, Ori
Oke* and 'Mammy Water' in the Veneration
of Sacred Natural Sites in Southern Nigeria

● **Temitope Israel Borokini**
Plant Genetic Resources Unit, National Centre for Genetic
Resources and Biotechnology (NACGRAB), Moor Plantation,
Ibadan, Nigeria

I am happy to connect...



tbisrael@nevada.unr.edu



Israel Borokini



Israel Borokini



Israel Borokini



@tbisrael



Israel Borokini



Israel Borokini