

Nature Kenya Committees and Projects Report 2019-2020

COMMITTEES

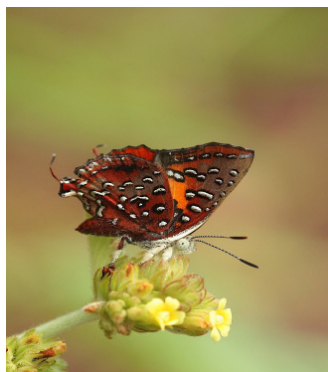


INSECT COMMITTEE

Activities include: lectures, field studies, publications and free insect identifications.

Milestones 2019/2020

- Completed 52-week collection of insect samples under the Global Malaise Trap Program.
- Commenced butterfly project at City Park's Pollinator Garden with FoCP and Youth Committee.
- Talks and lectures on pollinators by Dr. Dino Martins.
- Involved in joint project with University of Texas on "Ecology of Invasive Species".
- 7,793 downloads & 1,170 views of Our Friends the Pollinators: A Handbook of Pollinator Diversity from discoverpollinators.org & academia.edu
- Data-basing, sorting and maintenance of insect specimens.



Axiocerses sp. sipping nectar.
PHOTO: DINO MARTINS

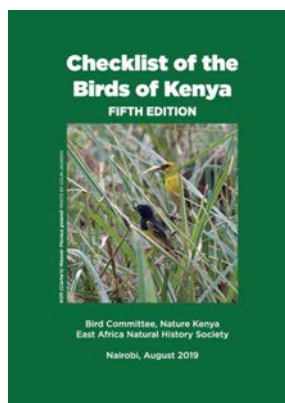
insects.eanhs@gmail.com

BIRD COMMITTEE

Activities include: ornithological advice, publications, taxonomy, bird ringing, records, databases and supporting Nature Kenya's bird walks.

Milestones 2019/2020

- Published Checklist of the Birds of Kenya 5th Edition.
- Participated in Museum-KWS-Nature Kenya waterbird counts in July and January.
- Promoting efforts to highlight the value of owls to people: owls control pests and are part of the overall balance of nature.



birds@naturekenya.org

SCOPUS: JOURNAL OF EAST AFRICAN ORNITHOLOGY

Impact measured by African Journals Online:

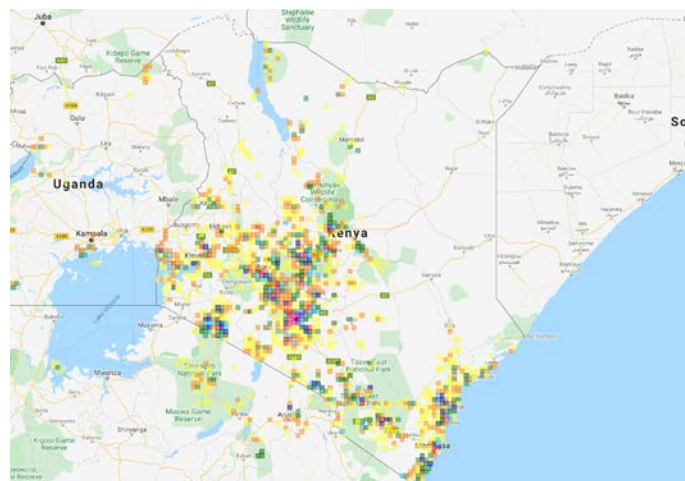
- Downloaded in 59 countries.
- 50% increase in article downloads from 2017 to 2019.

scopus@naturekenya.org

Kenya
Bird
Map

KENYA BIRD MAP PROJECT

Mapping the distribution and abundance of Kenya's birds.



Milestones 2019/2020

- 17% of Kenya has been covered so far. Northern and eastern Kenya are the least covered.
- 2019 records were better than 2018 in terms of: Records submitted: 2019 - 66,510, 2018 - 52,556; mappers: 2019 - 139, 2018 - 101; and pentads covered, 2019 - 412, 2018 - 398.
- Highlight of 2019: Lammergeier (Bearded Vulture) seen at Mt. Mtelo, West Pokot County, in May by Robert Muchunu, Jagi Gakunju, Timothy Mwinami and Rupi Mangat. This is one of the rarest birds in Kenya and it was the first record of this species on the Kenya Bird Map.

kenyabirdmap@naturekenya.org

SUCCULENTA EAST AFRICA

Milestones 2019/2020

- A new succulent plant added to Kenya record: *Euphorbia heterochroma* var. *heterochroma*, previously unknown in Kenya, though present in Tanzania, was found at Lake Chala by Susie Goss. It was identified positively by Dr. Emily Wabuyele and Prof. Len Newton.
- Succulenta EA publications transferred onto two DVDs. Copies at the Nature Kenya shop.
- Created website (succulentaea.org) now on the internet. A new email address: info@succulentaea.org set up to deal with enquiries.



Euphorbia heterochroma var. *heterochroma*. PHOTO: SUSIE GOSS

Andrena Low: jalow5@gmail.com

Bob Entwistle: robertentwistle@gmail.com

COMMITTEES & PROJECTS

ENVIRONMENTAL LEGISLATION AND POLICY WORKING GROUP (ELPWIG)

Milestones 2019/2020

- Five sector-level comments on policies and legislation submitted including Frameworks and Instruments in the Mining Sector.
- Submitted comments on three Senate and two National Assembly bills among them Natural resource (Benefit sharing) Bill 2018.
- Contributed to 5 County level legislation, including Kilifi County Forest Conservation and Management Bill, 2018 which has since been enacted into law.
- Submitted comments to 15 Environmental Impact Assessments (EIA) on projects proposed near sensitive conservation areas among them 61 storey Exotja Highrise Resort in Kilifi County near Malindi /Watamu Marine park.
- Raised 8 concerns on activities/projects potentially posing negative environmental impacts such as Construction of the section of the Olkaria-Lessos-Kisumu transmission line on the southern edge of Lake Elementaita. As a result KETRACO met Nature Kenya twice, the National Environment Complaints Committee took up the issue with mandated agencies and Ramsar Secretariat raised a concern with the Kenyan government.

policyadvocacy@naturekenya.org



Olkaria-Lessos transmission line adjacent to the old line near L. Elementaita.

KENYA HERPETOFAUNA WORKING GROUP

- Field expedition to Dakatcha Woodland, Kilifi County, in September 2019; 25 species were recorded.

Galam's White-lipped Frog
Amnirana galamensis.

PHOTO: MUTUNDURA B.



YOUTH COMMITTEE *Connecting Youth with Nature*

Milestones 2019/2020

- Carried out several education outreach programs with different schools.
- Project on butterfly breeding at the pollinator garden at City Park kick-started.
- Clean-ups done in different parts of Nairobi in collaboration with different groups.

youthcommittee@naturekenya.org



YC members during school outreach at Arboretum. PHOTO BY: JOSEPH (MJOSE)

PLANT COMMITTEE

Milestones 2019/2020

- Participated in description of a new species to science from Kenya: *Polystachya danielana* (Orchidaceae) (Cherangani Hills, Elgeyo Marakwet County).
- Developing Plants of City Park Field Guide (at designing stage).
- Unique collection from Tana River County: *Hydnora abyssinica* (Hydnoraceae), a parasite on Acacia roots, is rarely collected since the flower tip only emerges after good rains. It is pollinated by beetles and flies.
- Conducted three fieldworks at Nairobi City Park, Laikipia Nature Conservancy (LNC) and Konza Technopolis area.

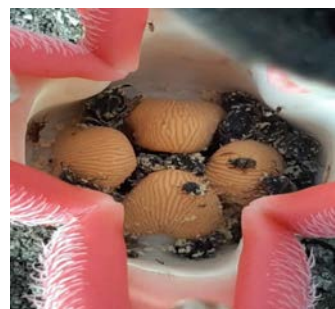
botany@museums.or.ke

Twitter: @EAHerbarium_NMK



Polystachya danielana

PHOTO: SAJOREC



Hydnora abyssinica.

PHOTO: K. MATHEKA

For updates visit

www.naturekenya.org

EDITORIAL TEAM

Fleur Ng'weno, Gloria Waswa,
John Mwacharo, Caroline Chebet
and Serah Munguti

LAYOUT

John Mwacharo

FRONT BANNER

Lorenzo Barelli



THE EAST AFRICA NATURAL HISTORY SOCIETY



For contributions, advertising and subscriptions, contact us by:

Post: P. O. Box 44486 GPO, Nairobi

Telephone: 020 3537568/0780149200/0751624312/ 0771343138

Email: office@naturekenya.org

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MAMMAL COMMITTEE

What we do: Research in mammals' biology, ecology and conservation, capacity building and mapping all mammals in Kenya.

Milestones 2019/2020

- Visa Oshwal Academy mammal talk and open day at Karura forest. Exhibited big mammals and 100 people participated.
- Two mammal talks: Conservation status of Kenyan mammals and State of primates in Eastern Africa
- Developing 1st Kenya mammal checklist.

mammalcommittee.info@gmail.com

Facebook: Mammal Atlas in Kenya (MAKE)



Students viewing trophies during Visa Oshwal Academy Open Day organized by Mammal Committee at Karura. PHOTO BY: AZIZA ZUHURA

SAMAKI WORKING GROUP OF KENYA

What we do: Create awareness and appreciation of fishes of Kenya and promotes fish conservation and sustainable use, Samaki days, fish excursions, interactive workshops and talks or lectures, participation in national environment days.



Milestones 2019/2020

- Monthly excursions at Rueka Dam in Kiambu, Mbagathi River, Theta River, Athi River, Mbagathi River, Stony Athi, Theta River.
- 3-day field expedition to Mto wa Mawe, Athi River – Machakos County to check on impact assessment from the projects near the river including the up coming Konza City.

info@kenweb.or.ke

PROJECTS

FRIENDS OF NAIROBI ARBORETUM (FONA)

Maintaining the Arboretum for Recreational, Educational and Scientific Knowledge.

Milestones 2019/2020

- New Management plan 2020-2024 being finalised.
- Arboretum tree survey report was successfully completed.
- Introduced a conservation fun day for kids during the December holidays.
- Tree walks and monthly lectures continued with significant increase in the number of attendees but unfortunately stopped with coronavirus restrictions
- Started exchange program for primary schools at the station.



Group discussions during a school exchange program on plastic pollution.

fona@naturekenya.org, education@nairobiiarboretum.org



FRIENDS OF CITY PARK

Committed to protecting and restoring City Park.

Milestones 2019/2020

- Engaged Peponi School children in a clean-up campaign, educational tour and talk. Bins and signage installed at City Park and in use.
- Kibagare River sewer leaks fixed. River already cleaner and clearer (pictured). Working with Athi Water (AWWDA), NMK, NCCG and I&M Bank to further rehabilitate the river and riverside.
- 11 new members joined FoCP Management Committee in January 2020.
- Synchronized existing Tree Management Plan with proposed Land Use Plan for City Park.



Website: www.friendsofcitypark.org; Tel: 0713 130005

Email: cityparkfriends@naturekenya.org

Facebook: [Focp.rafiki](https://www.facebook.com/focp.rafiki); Twitter: [@cityparkfriends](https://twitter.com/cityparkfriends)



Milestones 2019/2020

- Trained 10 community scouts.
- Purchased Isuzu DMAX 4x4 single cab pickup for patrols with the scouts in the forest.
- Renovated two KFS ranger outposts.
- Completed Kilifi Gold Triathlon education project bringing 1,376 children into the forest.
- Procured the first uniforms for the Arabuko-Sokoke Forest Guides Association (ASFGA).
- Purchased 10 Nikon 7572 binoculars for ASFGA members.
- Procured a cassava processing machine and solar drier for the Songa Mbele user group.
- Donated 187 fence posts to KWS for fence maintenance.
- Purchased 35 fence posts and rehabilitated 350 meters of fence line using Nature Kenya allocation.



info@friendsarabukosokoke.org

<https://www.friendsarabukosokoke.org/>

COMMITTEES & PROJECTS

NAIROBI BIODIVERSITY PARKS

No activity in 2019.



Ammocharis tinneana. PHOTO: MIKE DAVIDSON

PARTNER



Milestones 2019/2020

- Trained 48 biologists from 25 countries in month-long field courses in Botswana and Borneo.
- Delivered a 'Bootcamp training for conservation leaders' for 24 individuals from five South-East Asian countries.
- Held two experience sharing and networking events for 24 individuals in the Eastern Afrotropical (EAM) region and 23 in the Madagascar & Indian Ocean Islands (MADIO) region.
- Facilitated 17 individuals from MADIO region to four learning exchanges and five from EAM region to two learning exchanges.
- Ran two short courses training 26 individuals from eight African countries under 'Citizen Science in Africa'.



www.tropical-biology.org

JOINT EANHS-NMK

JOURNAL OF EAST AFRICAN NATURAL HISTORY

Milestones 2019/2020

- Vol 108 published in 2019: Five papers published in two issues totalling 98 pages.
- All papers are electronically available from <https://bioone.org/journals/journal-of-east-african-natural-history/issues> or Open Access from <https://www.ajol.info/index.php/jeanh>
- Income from BioOne in 2019 was \$9,992 (about Ksh 1million).
- Total income since we joined BioOne in 2007 = \$98,526 (about Ksh 10 million).

Bytebier@ukzn.ac.za

THE EANHS LIBRARY

Milestones 2019/2020

- Collection grew by 2,613 items.
- 1,689 clients were served.
- Being a member of the Biodiversity Heritage Library Consortium, we continued digitizing and uploading approved biodiversity literature onto BHL website www.biodiversitylibrary.org
- Elimu Asilia: an online platform on indigenous knowledge, an initiative of the Library, attracted close to 40,000 visitors through its website www.elimuasilia.org

akchege@museums.or.ke

Living with Covid 19

Indications are that the pandemic is becoming endemic. We are adapting to the challenges that come with the measures to keep our staff, partners and members safe. We continue with conservation work, including advocacy at the national and county level and working with communities to protect sites and species and sustain livelihoods. However, it is not yet business as usual. Some activities remain postponed and some may be postponed further; meanwhile new activities are starting up.

1. The National Museums and sites are open – but only on a pilot basis. We will keep you updated on any developments.
2. Members will receive an electronic version of the 2020 issue of the Kenya Birding magazine.
3. Members will receive an electronic version of the Nature Net until further notice
4. The Membership office and shop is closed until further notice. Membership recruitment and renewal continues. Visit <http://naturekenya.org/support/membership/> and use cashless payment options such as M-Pesa or credit/debit cards. Your membership cards will be processed and mailed to you.
5. As long as the main office remains open part of the time, members may also buy Arabuko-Sokoke honey. Pay by M-pesa (Pay bill 100300, account "Honey") and arrange a time to collect the honey. Ring the bell at the entrance of the office behind the galleries.
6. Wednesday Morning Birdwalks, Sunday bird walks, field trips and talks remain suspended until further notice.
7. The 'Lungs for Kenya' Charity Golf Tournament 2020 has been moved to a date in March 2021.
8. Birders are encouraged to take part in Global Birding on October 17.

Threats remain to species and habitats, and conservation work must go on. Please continue to support Nature Kenya, and to observe and enjoy nature from wherever you are.

For clarifications or to report your observations on species and sites, kindly contact us through email: office@naturekenya.org or telephone: 020 3537568, 0780 149200, 0751 624312, 0771 343138

Dr. Paul Matiku,
Executive Director, Nature Kenya – the East Africa Natural History Society





Covid and the Kipepeo Butterfly Project

Butterfly farming is a nature-based enterprise that demonstrates the values of forest conservation for community livelihood improvement. The idea of establishing butterfly farming as a livelihood-focused intervention was initiated by Dr. Ian Gordon in 1993, with the support of Nature Kenya and the National Museums of Kenya. Farmers living near Arabuko-Sokoke Forest raise the caterpillars of butterflies on forest plants. Once fully grown, the caterpillars form pupae – the resting stage in which they turn into butterflies. The pupae are then exported to live butterfly exhibits in Europe and the US.

Kipepeo was started with US\$50,000 from GEF Small Grants Program, and to date has generated over US\$2 million in export revenues, with around 1 million dollars paid to the local community living adjacent to Arabuko-Sokoke Forest. The Arabuko-Sokoke Forest Adjacent Dwellers Association (ASFADA), who report community livelihood initiatives incomes, projected in 2019 that farmers would sell butterfly pupae worth KSh.25 million (the figure presented in the Chairman's report in this year's AGM). Actual earnings for 2019 were in fact around half (KSh.11.3 million) of this estimate, with the farmers receiving 8.1 million.

Over the last eight years the production of pupae by local farmers has ranged from 88,000 pupae in 2011 to a high of 135,000 pupae in 2017. Total annual earnings have increased from KSh.6.8 million in 2011 to a high of KSh.19.7 million in 2017. In addition to the sale of butterfly pupae, the local community sells honey through the market place, which earned them KSh.4.4 million in 2019. In recognition of these achievements, Kipepeo was invited to host the 2018 International Congress of Butterfly Exhibitors and Suppliers in Malindi.

These revenues, well more than forty times the initial grant, are a tribute to the extraordinary efforts of the farmers around Arabuko-Sokoke Forest. As a

result of their enthusiastic embrace of the Kipepeo Butterfly Project, local attitudes to the conservation of the forest have been greatly improved. In 1993, 96% were unhappy with the presence of the forest and 54% wanted it totally cleared for settlement. Yet by 2014, the local community, thanks to Kipepeo and other efforts to improve their welfare (notably the KWS elephant fence), was instrumental in stopping plans for the seismic exploration of the forest for oil. Such action would have been unimaginable in the early 90's, when local resentment of the forest ran deep. At that time the forest was regarded as a source of suffering rather than of any benefits. The link between improved forest conservation and community well-being is clear.

In 2020, the global pandemic of COVID-19 had a negative effect on the butterfly industry value chain. There was the cancellation of shipments and flights from Kenya to the market countries. The demand for butterfly pupae decreased given that the majority of exhibitors closed shop due to no tourism. This had a huge impact on the local butterfly farmers who had no market for the pupae.

To cushion the farmers from this unexpected and unprecedented development, Nature Kenya provided improved crop seeds to 200 farmers, provided KSh.1 million to Kipepeo as capital for a soft loan scheme, supported the propagation of butterfly food plants, and supplied other butterfly breeding equipment. Soft loans will be repaid from butterfly earnings once the export ban is lifted. By end of August 2020, 200 farmers were able to harvest 110 kg of beans, 378 kg of green grams, and 429 kg of cowpeas. This has ensured that farmer families have food on their tables. In addition, each butterfly farmer has received 10 butterfly food plants for restocking purposes. Now things are getting back to normal and farmers are able to start exporting butterfly pupae again. 🐛

Focus on Mars

BY FLEUR NG'WENO

As the planet Mars circles around the sun, its orbit brings it close to Earth this month. Planets reflect the sun's light, and when Mars is close it appears very bright – brighter than the stars, and brighter than the planet Jupiter, which is larger but further away. In October 2020, Mars rises in the east around sunset, is high above at midnight, and sets in the west at dawn. On the 13th, Mars will be 'at opposition' – glowing brightly and in the sky all night.

Planets, Oct '20

Five planets can be seen in early October: In the evening, little Mercury is above the sunset. Bright Jupiter and golden Saturn are high in the west. Mars rises in the east, and is near the waning gibbous moon on Oct 2 and 3. Mercury sinks into the sunset at mid-month. The waxing moon is near Jupiter on Oct 22, near Saturn on the 23rd and near Mars on the 29th.

In the morning, brilliant Venus is above the sunrise. The waning crescent moon is near Venus on October 14.

Moon, Oct '20

Full moon on Oct 1. Last quarter, Oct 10. New moon, Oct 16 – look for the faint crescent moon near the planet Mercury, low over the sunset, on Oct 17. First quarter, Oct 23. And full moon, Oct 31. As it is the second full moon this month, it is sometimes called a "blue moon".

October stars

High overhead, the bright star Altair is flanked by two fainter stars. In the north below Altair, about halfway up from the horizon, look for bright Deneb and brilliant Vega. These three stars – Altair, Deneb and Vega – form a giant triangle. Deneb is also the tail of Cygnus the flying swan. Three stars form the body and wings of the swan. Three other stars form the long neck, stretching upwards into the triangle.

Further east is another geometric shape, a giant square with one bright star at each corner. This is the constellation of Pegasus, the flying horse of ancient Greek myths. Below Pegasus and to the left, low in the north, stars form the shape of a letter "M" – the constellation Cassiopeia.

On the other side of Pegasus, high in the southeast, is the

bright star Fomalhaut. The star Achernar, even brighter, is rising in the southeast.

October Sun

In Kenya in October, the sun rises and sets earlier each day. By month's end the sunrise in Nairobi is at 6:11 am, and the sunset at 6:21 pm.

Galaxies

A galaxy is a huge star system. Our sun and all the stars we can see with our eyes alone are part of the Milky Way galaxy. On October and November evenings here near the equator, we can see three other galaxies. To see them, you need a clear, dark night, away from city lights and without a bright moon. Your own eyes are enough, but binoculars are helpful.

The Milky Way lies across the sky this month. This pale ribbon of stars stretches from the constellations of Scorpius and Sagittarius in the southwest, past Jupiter, to the stars Altair and Deneb in the north and the constellation Cassiopeia in the northeast.

Look carefully between the square of Pegasus high in the east and the M of Cassiopeia below it in the north. Do you see a blurred, hazy spot of light? This is the Great Spiral Nebula M31 in the constellation of Andromeda. If possible, view it with binoculars or a telescope. The Andromeda Nebula is a galaxy of millions and millions of stars.

To see the other two galaxies, choose a place with a good view of the southern sky (and a clear, dark night). Look south (left of the sunset) or further southeast, below the bright star Achernar. You may see two pale areas, like small round clouds, low over the southern horizon. These are the Small and Large Magellanic Clouds. They are small galaxies, composed of millions of stars – the nearest galaxies to us, apart from our own Milky Way.

Meteors

At times the Earth travels through areas of dust in space, left from the passage of comets. When these particles fall into the Earth's atmosphere, they burn up, shining briefly for a moment. Look out for such meteors during the Orionids Meteor Shower, Oct 2-Nov 7, especially on Oct 22 between midnight and dawn. 🌠

Birding Updates

Wednesday Morning Birdwalks and monthly Sunday Birdwatch from Nairobi remain suspended.

Mombasa Birdwalks are held the 3rd Saturday of each month. To check meeting time and place, please contact:

Taibali Hamzali <thamzali@gmail.com> / 0733-980540; or Facebook page: <<https://www.facebook.com/groups/FFJmombasa/>>

Global Birding Big Day 17 October 2020

Last May over 50,000 citizen scientists from 175 countries across the world jointly collected 2.1 million observations of birds – in one day! This was the Global Birding Big Day. Kenya excelled, we climbed the rankings finishing 11th in the world with 613 species recorded, showcasing our pedigree as a fantastic birding destination.

The big day is happening again this October 17th. Washington Wachira and friends are co-ordinating our national effort to visit as many key sites as possible and think it is possible to record 800 species!

If you want to be a part of this effort please contact <birds@naturekenya.org> to be a part of Team Kenya. You can find all the information you need to participate on the Ebird website: <https://ebird.org/news/october-big-day-2020-bigger-than-ever>. Happy birding everyone!

Remember to send your records to the **Kenya Bird Map** project to help document the distribution of Kenya's birds <<http://kenya.birdmap.africa/>> If you have questions, write to <kenyabirdmap@naturekenya.org>

Online birding:

- To learn more about Kenyan birds and enjoy virtual birding tours, take a look at the new YouTube channel named "The Safari Naturalist":

<https://www.youtube.com/channel/UCajjLtyL9G6mJ20Ajw1RLxA>

- More stories from virtual birding tours are shared under "The Safari Naturalist" blog website: <https://www.thesafarinaturalist.com/virtual-birding-tours/>
- Ndege Wetu (14-part blog series on the birds of Kenya) <<http://www.shotsbyshema.com/category/ndege-wetu/>>
- Wings Over Kenya Facebook page
- BirdLife International < <http://www.birdlife.org>>
- The Cornell Laboratory of Ornithology Bird Academy <<https://academy.allaboutbirds.org>>

To stay updated with the birding scene in Kenya, sign in to the new Kenyabirdsnet platform on Google Groups at:

<https://groups.google.com/d/forum/kenyabirdsnet>

After signing in you will be able to post your records through the following email address:

kenyabirdsnet@googlegroups.com

Laughing Doves dying off in large numbers at watering points



Since 2006, Laughing Doves *Streptopelia senegalensis*, have been dying off at watering points in several locations, mainly in the semi-arid and arid regions of Kenya. Outbreaks have been reported in Milgis, Melako, Kina, and Biliqo-Bulesa in Marsabit and Isiolo Counties. At one site, up to 977 carcasses were counted. A laboratory test on some of the dead birds revealed the cause of death as Newcastle disease caused by a highly infectious strain of a virus specific to pigeons.

The die-offs occur at permanent water bodies where wildlife and livestock meet to drink, however, no livestock or any other species of wildlife, has been found terminally ill or dead. All these sites have a common characteristic in that they are located around stagnant pools or slow-flowing streams that appear greenish due to algal growth. At one pool, sick Laughing Doves and their carcasses were scattered up to 40 meters away. The doves fly in to drink, but immediately after drinking, they become listless, drowsy and cannot fly. Olive baboons capture and feed on the sick birds but do not seem to fall sick or die.

In case you come across sick or dead doves, please report to:

- Dr. David Ndeereh or Dr. Vincent Obanda
Veterinary Department,
Kenya Wildlife Service,
Cell: Dr. Ndeereh (0722-556-380) or Dr. Obanda (0721-799-676)
Email: dndeereh@kws.go.ke;
vobanda@kws.go.ke
- Ornithology Section of the Nairobi Museum
John Musina
Cell: 0722-503-315
Email: jmusina@museums.or.ke

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Schools, Clubs	1,500
Corporates	20,000 -30,000



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- Select 'Lipa na Mpesa'
- Select 'Pay Bill'
- Enter business number **100300**
- Enter account number (**put your lapsed membership number or write new member**)
- Enter the amount, enter your PIN
- Confirm details & press OK

For details on associated groups such as Youth Committee, Succulenta, and Friends of Nairobi Arboretum, City Park or Arabuko-Sokoke Forest, contact office@naturekenya.org