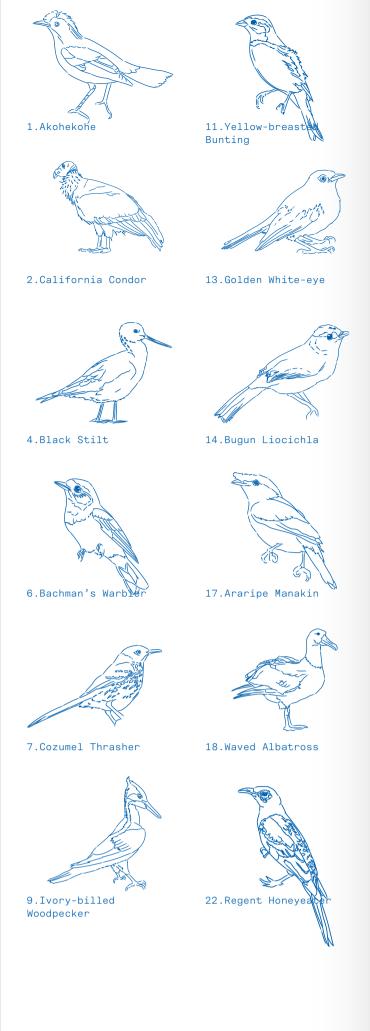
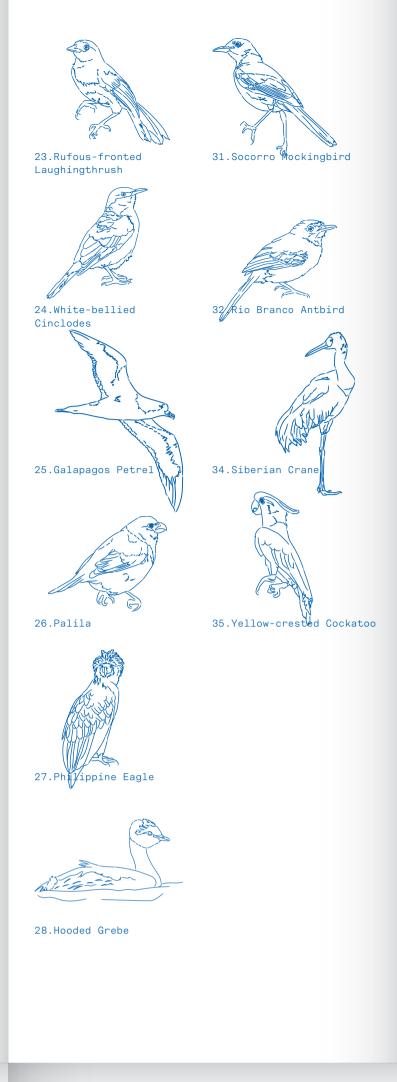
While environments are radically altered by humans, ecosystems are highly affected. Biodiversity loss is one of the major challenges of today.

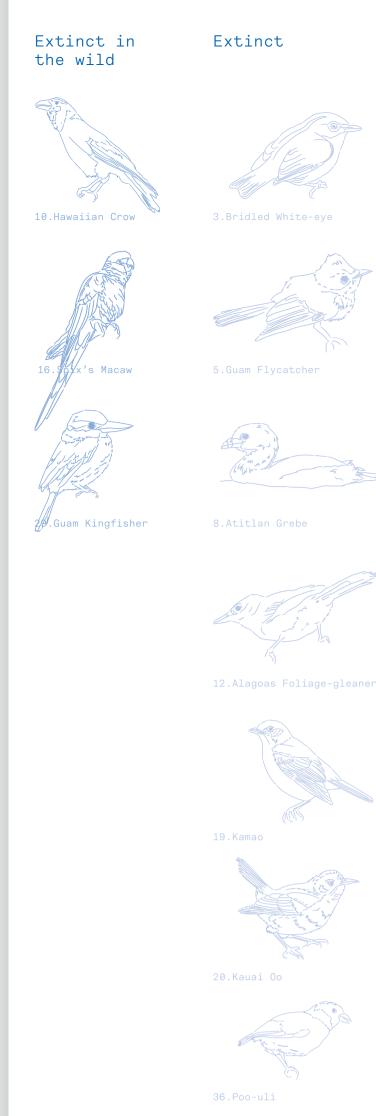
In response to human agency disturbances, species are moving, changing, disappearing. Birds' populations are shifting rapidly over large areas and some of them are drastically declining.

According to the International Union for Conservation of Nature's Red List of Threatened Species, there are 164 (known) bird species extinct and 226 critically endangered. Thanks to the wildlife media archive Macaulay Library of the Cornell Lab of Ornithology and its contributors, we can still listen to some of these birds.













decline are unknown. causes of recent population species' population. The precise the cause of past declines in this disease-carrying mosquitoes are alteration, and the spread of ↓ Habitat destruction and

often in short series. chittering notes. Call a loud chivk, Voice: Song a quiet jumble of patch just behind mask. brown of crown, with bold, pale Grey above mask, shading into black mask extending behind eye. greyish-white below, with broad finch-like bill. Adult brown above, sport-tailed passerine with heavy Description: 14 cm. Chunky,

> Nawaii, US RF Station 4, Maui, Hana Forest Reserve; by Timothy A. Burr. ΦRecorded 21 July 1982

PHAEOSOMA eye. Black primaries, yellow iris 36.MELAMPROSOPS



to agricultural fields. logging and conversion of forest endangered status, alongside for this species' critically is almost entirely responsible trade on the cagebird market ↓ Illegal trapping for commercial

but also sweeter whistles and Often gives single harsh screech Voice: Loud and very raucous. eye-ring and grey feet. wings and tail. Black bill, bluish and yellow under-surfaces to yellow crest, yellow ear-coverts All-white with forward-curling from on-going habitat loss owing Medium-sized white cockatoo. Description: 33-35 cm.

.sland, Nusa Tenggara, Lesser Sundas, Komono 2015 by Lucas DeCicco.

(Yellow-crested Cockatoo)



↓ This species is suspected to have

has feathered mask and buff or

and reddish legs. Male slightly

extending from bill to behind

white crane. Adults all white,

Keoladeo Ghana Sanctuary,

⇔Recorded 18 February 1975

to logging and agricultural

East Nusa Tenggara,

Sumba Island; KM 51

√A/Recorded 5 February 2012

by Matthias Fehlow

Indonesia

↓ It is undoubtedly at some risk

Description: 140 cm. Large

except for dark red mask

by Ronald T. Sauey.

(Siberian Crane)

34.LEUCOGERANUS

LEUCOGERANUS

Voice: Flute like and musical.

larger than female. Juvenile

cinnamon plumage.

grey. Black wings and tail with with white throat streaked dark feathers. Female dark slate-grey list of sqif bas strevor-gaiw and breast, white fringes to Yangtze River, resulting in lower white streaking on throat hydrological patter of the lower is mostly black with indistinct Gorges Dam has changed the long-tailed, black antbird. Male Construction of the Three Description: 15 cm. Mid-sized, levels of wetland conversion. three generations, in line with decreased rapidly over the last

Takutu-Upper Essequibo, River near Lethem, Upper Rupununi District; Ireng by Davis W. Finch.

rapid decline over the next three

Amazon will cause an extremely

 $\boldsymbol{\downarrow}$ Future deforestation in the

pook or faster kikuk notes.

white markings as in male.

Voice: Series of up to 20 defined

(Rio Branco Antbird) 32.CERCOMACRA CARBONARIA

from areas with little or no

cat predation, which effectively

habitat for this species. Also,

are reducing and degrading

↓ Intensive sheep-grazing and

persistent locust swarms

Loud whichoo call.

Blackish bill and legs.

streaked brown on flanks.

supercilium. Whitish underparts,

with dusky lores and short, pale

and darker tail. Brown head

two narrow, white wing-bars

upperparts, darker wings with

Socorro Island, Colima,

by Steven N. G. Howell. ΦRecorded 14 February 1988

(Socorro Mockingbird)

31. MIMUS GRAYSONI

removes mockingbirds



this species being endangered. mining are the main reasons for is under threat from titanium the fact that the Sokoke forest woodcarving and firewood, and of Brachylaena buillensis for (and often illegal) extraction ↓ Climate change, unsustainable

10 or more times per minute.

Voice: Soft too too, repeated It feeds on insects, mostly beetles. and eyes drawn closed to slits. compressed, ears held erect thicket, usually in pairs, body scops-owls. At day-roost in and vermiculated like most occur. Heavily barred, streaked Both grey and rufous forms small owl with slight "ears". Description: 15 cm. Very

Sokoke Forest, Kenya by G. Stuart Keith.



taken into captivity for captive remaining wild birds were the wild in 1986, when the last suakes it became extinct in ↓ Following predation by invasive Voice: Grating warbler song.

blue-green mantle wings and tail. around the hindneck and shining mask extending as a thin band and hind collar, greenish-black top of the head, underparts small kingfisher with a rich rufous plain brown passerine. Brown Description: 20 cm. Distinctive Description: 25 cm. Mostly

> Andersen South Guam by H. Douglas Pratt. 49Recorded 30 June 1978

(Guam Kingfisher) CINNYWOWINDS 29. TODIRAMPHUS



species' low reproduction rate.

include climate change and the

salmon and trout. Other factors

introduction of American Mink,

generation due to the

rapidly over the past three

↓ Population size has declined

peaked forecrown. Extensive

black head. Contrasting white

white with dark grey back,

Laguna El Cervecero;

by Ignacio Roesler.

(Hooded Grebe)

Description: 32 cm. Largely

forehead merging into a reddish

extending up the hindneck to its

Buenos Aires, Santa Cruz,

El Sauco, Meseta del Lago,

⇒Recorded 10 December 2012

of this species in the past three

main cause for the rapid decline

↓ Extensive deforestation is the

gives regular series of high-

grey bill, yellow legs with huge

underwings. Pale grey iris, dark

brown. White underparts and

shaft-streaks. Upperparts dark

crown and nape with black

Description: 86-102 cm.

Cotabato, Philippines

North Bo. Amabel, Sitio

by Robert S. Kennedy.

crest. Dark face, creamy-buff

nape feathers forming shaggy

whistles. Begging juvenile

Voice: Loud, high-pitched

pitched cries.

endangered species. For this it is a critically compete for caterpillar food. tant sqssw biotisereq bns predation by introduced cats introduction of ungulates, habitat degradation by the due to prolonged drought, population declines since 2003 extremely rapid annual ↑ This species has suffered

song. Call a sweet chee-klee-o Voice: Quite sweet canary-like indneck crown. of back extending forward on Female less golden and with grey Argentina with broad, golden edges. and dark wing and tail feathers and rump, white underparts, lores and bill, dark grey back and breast surrounding black Male has golden-yellow head finch with short, rounded bill. 58. PODICEPS GALLARDOI Description: 19 cm. Large

> Mauna Kea Forest Reserve, by H. Douglas Pratt. ΦRecorded 5 February 1978



in the past three generations the rapid decline of the species caused nest failure, which led to such as brown and black rats

↓ A number of invasive species

koo, the last note drawn out. Voice: Four syllable kee-kee-keewhite forehead. amounts of black marking on long-winged gadfly petrel. Varying Large deep bill and elongated Description: 43 cm. Large,

Islands, Ecuador Santiago Island, Galápagos San Roque; Mindanao Gregory F. Budney. by James L. Gulledge and ΦRecorded 25 February 1986 ΦRecorded 10 March 1979

(Galapagos Petrel)

21. AMMOSPIZA MARITIMA 23. GARRULAX RUFIFRONS



critically endangered. ↓ Due to habitat destruction and Voice: Chattering, long trill and

tail with white tips to outer broad white wingbar. Blackish upperparts, blackish wings with of bell-like notes. ear-coverts. Brownish-rufous with black lores and dark brownish-grey head and face, Description: 24 cm. Pale Pucacocha, Pasco, Peru by Niels K. Krabbe. Pampa ⇔Recorded 12 November 1983

(White-bellied Cinclodes) 24. CINCLODES PALLIATUS

additional localities after surveys.

species could not be found in any

to be in continuing decline. This

degradation, this extremely small

population species is assumed

rectrices. White underparts.

loud *chec* call.

Dusky legs and bill.



decline in population size. cagebird trade caused a severe $\boldsymbol{\downarrow}$ Heavy trapping pressure for the

name "Poksai Kuda". reflected in the Indonesian whinnying of a horse as Voice: Likened to the gentle yellow-orange iris stands out nut, lores very dark and light Forehead an intense dark chest mid-level vegetation in groups. clumsily through dense low and moves rapidly though a bit brown laughing thrush that Description: 27 cm. Large

Lava, Indonesia Pangrango, West Java Chibodas; NP Gunung Gedeby Arnoud B. Van Den Berg 4»Recorded 17 November 1984

(Rufous-fronted Laughingthrush)



reasons for this species being large mature trees are the main sources through the reduction of poor and unreliable nectar development that resulted in for agricultural and residential ↓ Drought and habitat clearing

Voice: Distinctive. Mellow song duller. Juvenile browner. in folded wing. Female smaller, to rump. Three yellow panels and pale lemon from mantel lower belly. Embroidered back with black chevrons, whiter head and neck, creamy breast surrounding dark eye. Black white. Bare yellow warty skin boldly patterned yellow-and-Medium-sized black honeyeater Description: 20-24 cm.

New South Wales, Australia Valley, Capertee River, by Vicki Powys. Capertee ⇔Recorded 3 July 2008

(Regent Honeyeater) 22.ANTHOCHAERA PHRYGIA



vulnerable under the range approach the thresholds for range, and hence does not ↑ This species has a very large

Titusville, Florida, US Merritt island; near and Robert C. Stein. by William W. H. Gunn 4»Recorded 30 April 1963

(Seaside Sparrow)

this species' extinction. species were the major cause for $\boldsymbol{\downarrow}$ Habitat destruction and invasive

to render detection easy it any Voice: Far-crying voice ought ASU ,iisweH ,isueX

Headwaters of the Halehaha

Robert J. Shallenberger.

ΦRecorded 3 July 1975 by

Stream; Alakai Swamp,

(Kauai Oo) 20. MOHO BRACCATUS



and degradation of forests. mosquitoes and the destruction introduction of disease carrying causes for extinction were the driven it to extinction. The main of threats in the region have Kauai, USA, but the multitude to bnalsi naiiawaH adt no ↓ This species formerly occurred

pitched "police whistles". or frog-like braack and higher short notes including cat-like shorter notes. Calls a variety of trills, gurgling whistles, and cascade of notes including buzzy Voice: Song a long melodic scalloped with dark brown. with buff, grey belly heavily te-brown backs, heavily spotted bill. Juveniles have dark chocolamottling. Dark legs. Short broad and flanks with slightly darker backs, pale grey belly, breast -coloured thrush. Reddish-brown

ASU ,iisweH ,isueX Stream; Alakai Swamp, Headwaters of Halehaha Robert J. Shallenberger

Description: 20 cm. Small, dull-

Española Island, Galápagos by Niels K. Krabbe.

ψ Recorded 2 July 1975 by ΦRecorded 5 May 1984

(Waved Albatross)

ebnuorg gnigerof laqionirq

ati ni səriəsənəl fisheries in its

species has experienced

↓ Evidence suggests that this

substantial recent population

Bluish feet projected beyond

back and tail. Whitish breast,

over rump. Brown upper wing,

and nape. Chestnut-brown

tinged buff-yellow on crown

sized Albatross. White head,

Description: 90 cm. Medium

upperparts finely barred, coarse

like upperparts. Dull yellow bill.

remainder of underparts barred,

decline due to bycatch mortality

19. MAYDESLES WAYDESLINDS 18.PHOEBASTRIA IRRORATA

(Spix's Macaw)

Bahia, Brazil

cra-á cra-á

by Bret M. Whitney.

15.0 km South of Curaca,

Description: 55-57 cm. Delicate

blue-grey macaw with long

square-shaped head. Pale

blue underparts. Vivid blue

Voice: Strong and clear *cra-á*

↓ The last known individuals

in the wild disappeared at the

sightings of wild individuals

for trade and habitat loss.

end of 2002 with no confirmed

since. The species' decline was

primarily the result of trapping

upperparts, wings and long tail.

tail and wings. Pale ashy-blue

(Least Boobook) 35.CACATUA SULPHUREA 33. VINOX SUMBAENSIS Extinction Calls is a special commission to the artist Cláudia Martinho, in which she uses sounds from the archive to create a path of multiple sonic encounters with extinct and critically endangered bird species. Listening to this diversity of calls and songs, with its rhythmic variations and tonal richness, is an invitation to reconnect with the enchantment of birds' communication. It is an act of reclaiming the

> human beings. The soundscape is spatialised in resonance with maat's acoustic space and the intervention *Beeline* by SO – IL so as to create a diversity of points of listening and thus enable different sensory experiences. From a sonic activism that highlights the global ecological crisis to close interspecies vibratory encounters, this work calls for a shift in the way we relate to our environment towards an ecological intimacy and our innate ability of attunement to the

invisible powers of the language

of nature, deeply rooted in

voices of non-human beings. Cláudia Martinho has been developing an experimental practice that embraces sound art, architecture, eco-acoustics, animism and activism. She is particularly interested in spatial and sonic co-creation as a tool and transformative action.

1. PALMERIA DOLEI (Akohekohe)

Koolau Forest Reserve; Hana Rainforest, Maui Hawaii, USA

Description: 18 cm. Large honeycreeper with slightly down curved sharp bill and forward-curving white feathered crest on forehead. Mostly black, streaked with orange-red and silvery-grey. Shaggy red-orange patch on hindneck, orange-buff eye-ring and short post-ocular stripe. Primary feathers tipped white. Juvenile all sooty-grey with orange-buff eye-ring and very short grey crest. Voice: a variable series of lowpitched notes ab-gurk-gurk-gurk or ab-kob-beb-kob-beb and other

variations. Call a human-like up-slurred whistle. ↓ Habitat destruction and the rapid spread of disease-carrying mosquitoes are the primary



2.GYMNOGYPS CALIFORNIANUS (California Condor)

♠Recorded 2 April 2003 by Vincent Gerwe. Hopper Mountain National Wildlife Refuge / Ventura California, USA

Description: 117-134 cm. Black with white wing-linings and silvery panel on upper secondary feathers. Head naked and orange-red. Juveniles with black 5. MYIAGRA FREYCINETI head and underwing mottled dark. Soars on horizontal wings

↓ Intensive conservation, reintroduction and release of this captive-bred bird has led to a very small but increasing population of this species in the wild.

CONSPICILLATUS (Bridled White-eye)

by Robert J. Shallenberger. ⇒Recorded 31 July 1978 by H. Douglas Pratt. Yap, Guam

> ↓ The last known sighting was in 1983. Its extinction is thought to be due to the invasive brown tree-snake.



NOVAEZELANDIAE (Black Stilt)

⇒Recorded 7 November 1969 by Robert A. Falla and William V. Ward.Ohau River Mouth; Mackenzie Basin,

Description: 40 cm. Black long-legged stilt. Adult black with long, fine, black bill. Very long red legs. Juvenile white breast, neck and head with black patch around eyes. Voice: Loud, high-pitched, onotonous yapping.

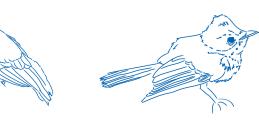
↓ Habitat loss along with introduced mammals like cats, ferrets and others are the primary threats to this species.



(Guam Flycatcher)

by H. Douglas Pratt. Andersen South Guam

↓ This species formerly occurred on Guam but became extinct in 1983. The cause was predation by the introduced brown tree-snake.



6. VERMIVORA BACHMANII 8. PODILYMBUS GIGAS (Bachman's Warbler)

(Philippine Eagle)

Allen and Stuart G. Keith

decurved bill. Adult male black forecrown, grey hindcrown and nape, yellow forehead, eye-ring, lores, supercilium and throat. Yellow underparts, black patch on upper breast, white undertail. Olive-green upperparts, black patch on lesser coverts, grey tail with white spots on inner webs. Voice: Song a buzzy pulsating, insect-like trill, sometimes given in song flight. Call a low, hissing zee and eep.

↓ The drainage of river-bottom swamplands and the near total clearance of canebrakes in the USA, combined with the conversion of much of Cuba to sugarcane plantation, offer the best explanation for the disappearance of this species.



7. TOXOSTOMA GUTTATUM (Cozumel Thrasher)

→Recorded 28 October 1991 by Andres M. Sada Cozumel Island, Quintana Roo, Mexico

Description: 23 cm. Brown and white bird with long, curved bill. Rich chestnut-brown above with two white wingbars. Greyish face with paler supercilium. White underparts heavily streaked black. Black bill and legs. Voice: Complex scratchy warbling.

↓ This formerly common species suffered a rapid decline following the 1988 hurricane. It is considered Critically Endangered because any remaining population is likely to be small.

by Anne LaBastille. Lake Atitlan shoreline. Sololá, Guatemala Description: 12 cm. Slender,

26.PTERODROMA PHAROPYGIA 27.PITHECOPHAGA JEFFERYI

↓ Myriad alterations to its habitat caused the species' extinction between 1983 and 1986.

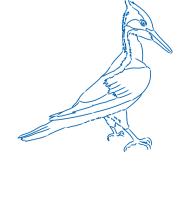


9. CAMPEPHILUS PRINCIPALIS (Ivory-billed Woodpecker)

→Recorded April 1935 by Peter Paul Kellogg and Arthur A. Allen Madison, Louisiana, USA

Description: 48-53 cm. Huge Black and white woodpecker. Mainly black with large white wing-patch, "braces" on mantle and stripe on side of neck from lower edge of ear-coverts to mantle. White underwing-coverts separated from black secondary feathers by white secondaries. In flight, resembles a duck and does not undulate. Voice: Single or double-note drum, toy-trumpet-like kent calls, sometimes as a fast series or as a double-note call.

↓ Logging and clearing for agriculture are responsible for the dramatic decline in numbers and range. Hunting has also been implicated in the rapid population decline, and it has been proposed that this is the primary cause of its decline, with habitat destruction playing a secondary role.



10. CORVUS HAWAIIENSIS (Hawaiian Crow)

by Timothy A. Burr Honaunau Forest Reserve Hawaii, USA

croaks.

or small raven. All dark sooty brown with paler primaries. Heavy black bill. Brown eyes. mouth lining.

↓ Due to extensive habitat alteration, particularly the reduction of understory foodof feral ungulates, logging, agriculture and the loss of

being developed.

11 EMBERIZA AUREOLA

by Bob McGuire. Buryatia, Russia

→ This species is critically

12.PHILYDOR NOVAESI

Juvenile has blue eyes and pink Voice: Huge variety of squawks, screams, growls, and dissonant

plants as a result of the activities pollinators and dispersers, the last two known wild individuals of this species disappeared in 2002. Some individuals remain in captive breeding facilities and a reintroduction plan is

(Yellow-breasted Bunting)

→Recorded 18 June 2017 Protoka Srednyaya Field Station, Republic of

endangered due to indications that the rate of population decline is even greater than previously understood and may have become extremely rapid during the past three generations. This is believed to be driven primarily by trapping in its passage and non-breeding ranges.

(Alagoas Foliage-gleaner)

by Curtis A. Marantz. Arie de Murici, Alagoas, Brazil

Description: 48 cm. Large crow Description: 18 cm. Plain rufous-brown furnariid. Dull ochraceous forehead and lores, scaled black, Blackishbrown crown scaled dark olivebrown. Narrow buffy-cinnamon supercilium and sub-ocular stripe. Dull chestnut eye-stripe. Blackish stripe from mandible to auriculars, spotted chestnut Voice: Slightly descending series

> alarm call. \downarrow Habitat loss due to logging, felling for charcoal and conversion of forest to sugarcane plantations and pastureland caused the

of whistles uü-uü-uü and a thürr

extinction of this species. There have been no sightings of the species since 2011.

13.CLEPTORNIS MARCHEI (Golden White-eye)

15. TYRANNUS CUBENSIS → Recorded 7 July 1978 (Giant Kingbird) by H. Douglas Pratt. Saipan; Marpi, Northern Mariana Islands

Description: 14 cm. Mediumsized, bright, warbler-like bird. Golden-yellow or peach coloured, browner above, with bright orange bill, legs and feet. Yellowish-white eye-ring. Voice: Flock calls a rasping schik and a loud whistle. Song a rolling warbler SEE-ME-can-you-SEE-ME-I-can-SEE-YOU-can-you-SEE-ME...

↓ The possible establishment of the brown snake would lead to an extremely rapid population reduction in the near future. The persistence of the species despite periodic typhoon damage and human-caused habitat changes may be due to its ability to utilise different habitats.

14. LIOCICHLA BUGUNORUM 16. CYANOPSITTA SPIXII (Bugun Liocichla)

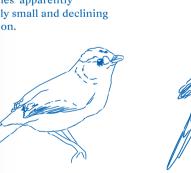
Pradesh, India

by Margaret J. Widdowson. West Kameng; Eaglenest Wildlife Sanctuary; below Lama Camp, Arunachal

Description: 22 cm. An olivegrey bird with a black cap, black upper tail. Striking gold streak on either side of a black eye, gold in the wing and extending as gold fringes. Dark remiges and rectrices are tipped with vibrant red. Female is a duller version of the male, with smaller red areas or replaced with yellow. Voice: Distinctive fluty notes

↓ Logging for fuelwood and timber is the main reason for the species' apparently extremely small and declining population.

with a terminal inflection.



17.ANTILOPHIA BOKERMANNI (Araripe Manakin)

⇒Recorded February 2004 by Gregory F. Budney. Parque Nacional Alexande von Humboldt; Nuevo Mundo Guantánamo, Cuba

Description: 23 cm. Large two-toned kingbird with massive bill. Grey above, white below and blackish crown and nape. Orange coronal strip normally concealed. Voice: Loud harsh chatter and four-syllable call.

↓ This species is extinct on two of the three island groups that it formerly occupied. The reason for the decline of the species is unknown.

↓ Its extremely small population is subject to ongoing pressure from agriculture and the development of recreational facilities. It is consequently listed as Critically Endangered.

→ Recorded 24 December 2015 by Garrit Vyn. Araripe

Plateau, Ceará, Brazil Description: 15.5 cm. Strikingly

patterned, black, white and red

manakin. Male is white with black wings and tail. Bright crimson red mid-back, nape, crown and frontal tuft of feathers. Reddish iris. Female is olivaceous-green with paler belly and reduced frontal tuft. Voice: A musical and warbled

uí-guru, guru-uí, guru-uí with

variations, and wreee pur calls.