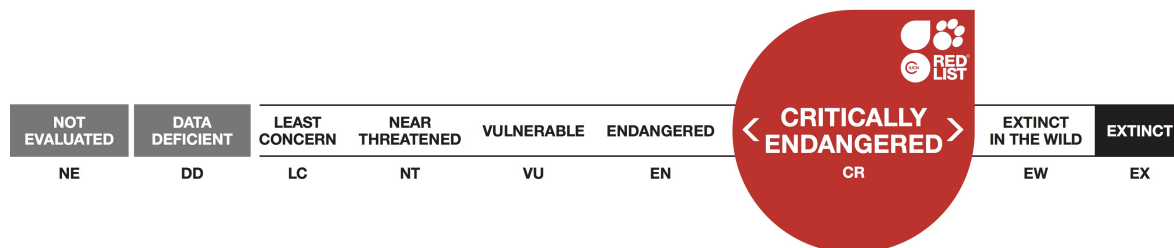


Campephilus imperialis, Imperial Woodpecker

Assessment by: BirdLife International



View on www.iucnredlist.org

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|-------|------------|---------|
| Animalia | Chordata | Aves | Piciformes | Picidae |

Taxon Name: *Campephilus imperialis* (Gould, 1832)

Common Name(s):

- English: Imperial Woodpecker
- Spanish: Carpintero Gigante, Pito Imperial, Pitoreal, Pitorreal Ocotero

Taxonomic Source(s):

del Hoyo, J., Collar, N.J., Christie, D.A., Elliott, A. and Fishpool, L.D.C. 2014. *HBW and BirdLife International Illustrated Checklist of the Birds of the World*. Lynx Edicions BirdLife International, Barcelona, Spain and Cambridge, UK.

Identification Information:

56-60 cm. Enormous, stunning black-and-white woodpecker. Mostly black with large white wing-patch and thin white "braces" on mantle. Huge ivory bill. Male has red crest (centred black) and nape. Female lacks red but has long, curling black crest. Juvenile browner. **Similar spp.** Much larger than any other sympatric woodpecker, and the only woodpecker in the area with solid black underparts. **Voice** Reportedly toy-trumpet like calls.

Assessment Information

Red List Category & Criteria: Critically Endangered () D [ver 3.1](#)

Year Published: 2016

Date Assessed: October 1, 2016

Justification:

This species has not been recorded with certainty since 1956, and extensive habitat destruction and fragmentation combined with hunting may well have driven the species to extinction. Extensive and prolonged searches within its former range (often following up on anecdotal reports) have failed to confirm the persistence of any individuals. Thorough mapping and analysis of remaining habitat has been conducted and the results do not provide much hope that any population has been able to survive. However, it cannot yet be presumed to be Extinct as the degree to which individuals can utilise sub-optimal regenerating forest is unknown, and it remains possible that some individuals survive. Any remaining population is likely to be tiny, and for these reasons it is treated as Critically Endangered (Possibly Extinct).

Date last seen: 1956

Previously Published Red List Assessments

2015 – Critically Endangered (CR) – <http://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T22681417A79682452.en>

2013 – Critically Endangered (CR) – <http://dx.doi.org/10.2305/IUCN.UK.2013-2.RLTS.T22681417A49808751.en>

2012 – Critically Endangered (CR)

2010 – Critically Endangered (CR)

2009 – Critically Endangered (CR)

2008 – Critically Endangered (CR)

2004 – Critically Endangered (CR)

2000 – Critically Endangered (CR)

1996 – Critically Endangered (CR)

1994 – Critically Endangered (CR)

1988 – Threatened (T)

Geographic Range

Range Description:

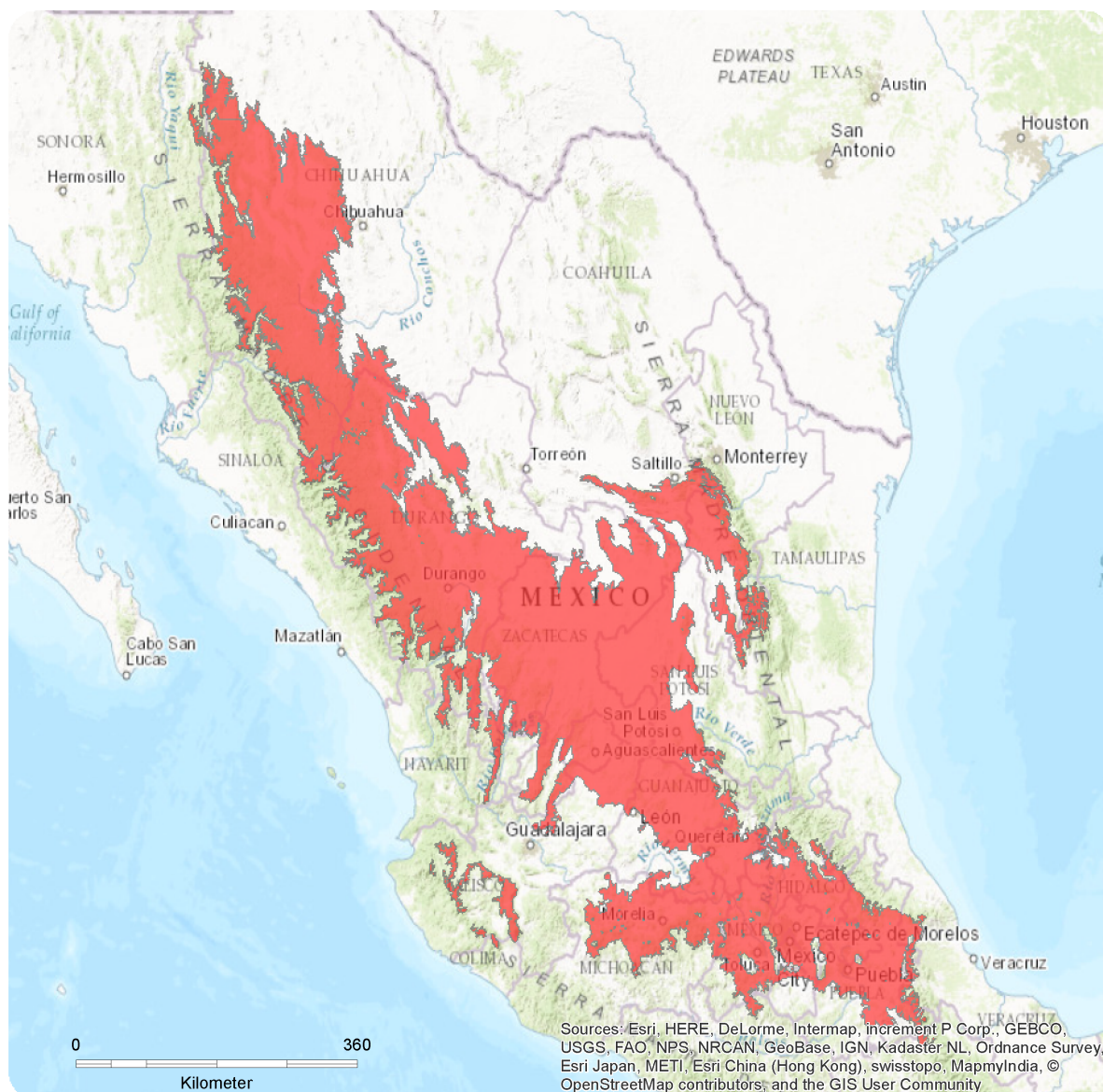
Campephilus imperialis was formerly distributed throughout the Sierra Madre Occidental of **Mexico** in Sonora, Chihuahua, Durango, Nayarit, Zacatecas (possibly) and north Jalisco with more isolated populations in west Jalisco and Michoacán. It was not historically a rare species within suitable habitat, but the total population probably never numbered more than 8,000 individuals (Lammertink *et al.* 1996). The last confirmed record was from Durango in 1956 but there have been convincing local reports of sightings after 1965 (Lammertink *et al.* 1996, Otto 2003). The most recent are of a pair in central Durango in 1993, a single male c. 20 km from this site in 1995, and a single female in north Sonora in 1993 (Lammertink *et al.* 1996). A reported sighting in north-central Durango in 1996 was followed up, but no birds were located (Otto 2003), and a bird was reported in November 2005 in the Barrancas-Divisadero region of Barranca del Cobre, Chihuahua, but subsequent searches have found neither Imperial Woodpecker, nor appropriate habitat or recent local knowledge of the species, within a 50 km radius of the locality (G. R. Homel *in litt.* 2005). There are now no unsurveyed old-growth remnants that are large enough for a breeding territory (M. Lammertink *in litt.* 2007). In March 2010, the location of the 1956 record in Durango was checked, but no evidence of the species was found, and interviews suggest that the species disappeared from the area in 1956-1960 (M. Lammertink *in litt.* 2010). In 2012 photographs, taken several years earlier, emerged of a specimen that was shot approximately 40 years ago in the Sierra de Pueblo Nuevo, Durango (M. Quiñones *in litt.* 2012). Even if a few individuals persist, extensive habitat modification and continued hunting pressure from rural people has made extinction virtually inevitable (Lammertink *et al.* 1996, M. Lammertink *in litt.* 2012).

Country Occurrence:

Possibly extinct: Mexico

Distribution Map

Campephilus imperialis

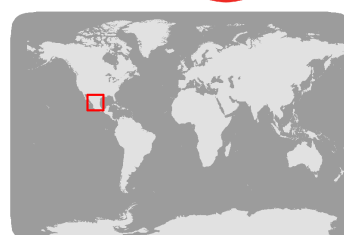


Range

■ Possibly Extinct

Compiled by:

BirdLife International and Handbook of the Birds of the World (2016)



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



Population

Any remaining population is assumed to be tiny (numbering fewer than 50 individuals and mature individuals) based on the lack of confirmed records since 1956; analyses of remaining habitat indicate that no tracts remain which are large enough to support the species.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

It requires extensive areas (26 km² per pair) of continuous open pine forest on relatively flat plateaus with large numbers of snags for foraging and nesting (Tanner 1964, Lammertink *et al.* 1996). Most records are from elevations of 1,920-3,050 m, but there are records as low as 1,675 m. There are many reports of more than four individuals, and this grouping behaviour may be related to its foraging specialisation. The main food source, beetle larvae in snags, is probably patchily distributed and peaks within a short period of time. Consequently, feeding-sites are probably best exploited by "nomadic" groups. If it operated in groups of seven or eight individuals, the minimum area of old-growth forest for a group would have been 98 km². Breeding has been recorded between February and June, and probably 1-4 eggs are laid (Lammertink *et al.* 1996).

Systems: Terrestrial

Threats (see Appendix for additional information)

The chief threats are the combined and interconnected impacts of hunting and habitat loss. It has been hunted for fun, food and supposed medicinal purposes over a long period of time, and feathers and bills were reportedly used in rituals by Tepheuana and Huichol tribes in the south of Durango (M. Quiñones *in litt.* 2012). The expansion of lumber operations into remote parts of the sierra opened up areas for settlement (and hunters) in the early 1950s. Although over-hunting probably precipitated the initial decline, this was compounded by the widespread removal of dead pines for pulp and mature pines for timber. By 1996, only 22 km² of suitable breeding habitat remained and even the area from which the pair were reported in 1993 had been logged (Lammertink *et al.* 1996). The species's social nature made it particularly susceptible to both types of threat; it frequently occurred in groups of four to eight (sometimes up to 20) individuals and therefore required large tracts of forest and was easily exploited by hunters (Mendenhall 2005). Interviews indicate that logging interests encouraged persecution of the species, including through the poisoning of foraging trees (Lammertink *et al.* 2011). No reserves were established to conserve the species (Winkler *et al.* 2015).

Conservation Actions (see Appendix for additional information)

Conservation Actions Underway

CITES Appendix I. A number of specific searches have been undertaken since the 1960s, including an extensive 11 month search in 1994-1995 (Lammertink *et al.* 1996). There are no confirmed records from protected areas. Searches are ongoing and anecdotal reports are regularly pursued. The species's range and potential habitat fragments have been comprehensively mapped, and identified areas thoroughly explored.

Conservation Actions Proposed

Prepare to follow-up any further local reports. Continue searching areas of old-growth forest in the former range, especially in small patches now surrounded by managed forest. The forest above the abandoned farm of Bajío de Don Victor, in Taxicaringa, and a patch of remnant forest to the north-west of Babicora, in Chihuahua, have been identified as priority sites for future searches (M. Lammertink *in litt.* 2010).

Credits

Assessor(s): BirdLife International

Reviewer(s): Butchart, S. & Symes, A.

Contributor(s): Lammertink, M. & Quiñones, M.

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Lammertink, M.; Gallagher, T. W.; Rosenberg, K. V.; Fitzpatrick, J. W.; Liner, E.; Rojas-Tomé, J.; Escalante, P. 2011. Film documentation of the probably Extinct Imperial Woodpecker (*Campephilus imperialis*). *Auk* 128: 671-677.

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Tanner, J. T. 1964. The decline and present status of the Imperial Woodpecker of Mexico. *The Auk* 81: 74-81.

Winkler, H., Christie, D.A. and Sharpe, C.J. 2015. Imperial Woodpecker (*Campephilus imperialis*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds), *Handbook of the Birds of the World Alive*, Lynx Edicions, Barcelona.

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External Resources

For [Images and External Links to Additional Information](#), please see the [Red List website](#).

Appendix

Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

| Habitat | Season | Suitability | Major Importance? |
|---|----------|-------------|-------------------|
| 1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane | Resident | Suitable | Yes |

Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

| Threat | Timing | Scope | Severity | Impact Score |
|---|--------------------------|---|----------------------------|--------------|
| 11. Climate change & severe weather -> 11.1. Habitat shifting & alteration | Future | Whole (>90%) | Unknown | - |
| | Stresses: | 1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects | | |
| 5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target) | Past, unlikely to return | Majority (50-90%) | Slow, significant declines | - |
| | Stresses: | 2. Species Stresses -> 2.1. Species mortality | | |
| 5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.3. Unintentional effects: (subsistence/small scale) [harvest] | Ongoing | Whole (>90%) | Rapid declines | - |
| | Stresses: | 1. Ecosystem stresses -> 1.2. Ecosystem degradation | | |

Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

| Conservation Actions in Place |
|---|
| In-Place Research, Monitoring and Planning |
| Action Recovery plan: No |
| Systematic monitoring scheme: No |
| In-Place Land/Water Protection and Management |
| Conservation sites identified: Yes, over entire range |
| Occur in at least one PA: No |
| Invasive species control or prevention: No |
| In-Place Species Management |
| Successfully reintroduced or introduced benignly: No |
| Subject to ex-situ conservation: No |

| |
|---|
| Conservation Actions in Place |
| In-Place Education |
| Subject to recent education and awareness programmes: No |
| Included in international legislation: Yes |
| Subject to any international management/trade controls: Yes |

Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

| |
|--|
| Research Needed |
| 1. Research -> 1.2. Population size, distribution & trends |
| 0. Root -> 4. Other |

Additional Data Fields

| |
|--|
| Distribution |
| Continuing decline in area of occupancy (AOO): Unknown |
| Extreme fluctuations in area of occupancy (AOO): No |
| Estimated extent of occurrence (EOO) (km ²): 1 |
| Continuing decline in extent of occurrence (EOO): Unknown |
| Extreme fluctuations in extent of occurrence (EOO): No |
| Number of Locations: 2 |
| Continuing decline in number of locations: Unknown |
| Extreme fluctuations in the number of locations: No |
| Lower elevation limit (m): 1920 |
| Upper elevation limit (m): 3050 |
| Population |
| Number of mature individuals: 1-49 |
| Continuing decline of mature individuals: Unknown |
| Extreme fluctuations: No |
| Population severely fragmented: No |
| Continuing decline in subpopulations: Unknown |
| Extreme fluctuations in subpopulations: No |
| All individuals in one subpopulation: No |

| |
|---|
| Habitats and Ecology |
| Continuing decline in area, extent and/or quality of habitat: Unknown |
| Generation Length (years): 6.5 |
| Movement patterns: Not a Migrant |

The IUCN Red List Partnership



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