

GENOME SEQUENCING

The Complete Genome Sequences of 30 Species of Falcons (Falconiformes, Aves)

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Biodiversity Genomes

We present the complete genome sequences of 30 species of falcons. Illumina sequencing was performed on genetic material from wild-caught specimens. The reads were assembled using a *de novo* method followed by a finishing step. The raw and assembled data are publicly available via Genbank.

Methods

Single wild-collected individuals were sampled for this study.

DNA extraction was performed using the Qiagen DNAeasy genomic extraction kit using the standard protocol. A paired-end sequencing library was constructed using the Illumina TruSeq kit according to the manufacturer's instructions. The library was sequenced on an Illumina Hi-Seq platform in paired-end, 2 × 150 bp format. The resulting fastq files were trimmed of adapter/primer sequence and low-quality regions with Trimmomatic v0.33 (Bolger, Lohse, and Usadel 2014). The trimmed sequence was assembled by SPAdes v2.5 (Bankevich et al. 2012) followed by a finishing step using Zanfona (Kieras, O'Neill, and Pirro 2021).

Results and Data Availability

All data, including raw reads and assembled genome sequence, is available via Genbank.

taxname	specimen_voucher	accession
<i>Daptrius ater</i>	FMNH 101040	JAVJIE000000000
<i>Falco ardosiaceus</i>	FMNH 82377	JAVLTF000000000
<i>Falco berigora</i>	KU 134054	JAOPUJ000000000
<i>Falco biarmicus</i>	FMNH 250152	JAVJID000000000
<i>Falco cenchroides</i>	KU 98805	JAOSZA000000000
<i>Falco cherrug</i>	IRGN KBG9ROHKW9	JAOPJX000000000
<i>Falco chicquera</i>	FMNH 319931	JAVLTG000000000
<i>Falco columbarius</i>	FMNH 364097	JAOPUE000000000
<i>Falco concolor</i>	FMNH 100418	JAVJGM000000000
<i>Falco deiroleucus</i>	KU 125726	JAOPJS000000000
<i>Falco dickinsoni</i>	FMNH 100004	JAVLTL000000000
<i>Falco fasciinucha</i>	KU 125719	JAOSLO000000000
<i>Falco femoralis</i>	IRGN ZW3NAPDIPV	JAOPJR000000000
<i>Falco jugger</i>	FMNH 300987	JAVLTJ000000000
<i>Falco moluccensis</i>	FMNH 100977	JAUTCE000000000

taxname	specimen_voucher	accession
<i>Falco novaeseelandiae</i>	LSUMZ 16740	JAOPUK000000000
<i>Falco pelegrinoides</i>	FMNH 369372	JAVCLA000000000
<i>Falco rufigularis</i>	LSUMZ 12347	JAOPJT000000000
<i>Falco rupicolus</i>	FMNH 101582	JAVJGO000000000
<i>Falco sparverius</i>	FMNH 100283	JAVLTI000000000
<i>Falco subbuteo</i>	FMNH 474701	JAVKLB000000000
<i>Falco zoniventris</i>	FMNH 185836	JAVLTH000000000
<i>Ibycter americanus</i>	IRGN 898APBXE3P	JAVJGI000000000
<i>Micrastur mirandollei</i>	FMNH 250724	JAUSZY000000000
<i>Micrastur ruficollis</i>	FMNH 456438	JAVKKW000000000
<i>Microhierax caeruleus</i>	FMNH 210986	JAVJGJ000000000
<i>Microhierax latifrons</i>	FMNH 211726	JAVJGN000000000
<i>Milvago chimachima</i>	FMNH 295956	JAUTDA000000000
<i>Phalcoboenus megalopterus</i>	FMNH 101027	JAVJHZ000000000
<i>Polihierax semitorquatus</i>	FMNH 369352	JAUTDB000000000

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