

GENOME SEQUENCING

The complete genome sequences of 73 species of Anseriformes (Aves, Chordata)

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Biodiversity Genomes

We present complete genome sequences of 73 species of Anseriformes.

Methods

Tissues from single, wild-collected individuals were used for this study. DNA extraction was performed using the Qiagen DNEasy genomic extraction kit using the standard process. Paired-end sequencing libraries were constructed using the Illumina TruSeq kit according to the manufacturer's instructions. The libraries were sequenced on an Illumina Hi-Seq platform in paired-end, 2 × 150bp format. The resulting fastq files were trimmed of adapter/primer sequences and low-quality regions with Trimmomatic v0.33 (Bolger et al. 2014). The trimmed sequence was assembled by SPAdes v3.15.4 (Bankevich et al. 2012) followed by a finishing step using Zanfona (Kieras et al. 2021). We would like to thank the following museums for contributing loans to this project: the Academy of Natural Sciences of Drexel University, Bell Museum of Natural History, Burke Museum of Natural History and Culture, Field Museum of Natural History, Florida Museum of Natural History, Natural History Museum of Denmark, University of Alaska Museum of the North, and the University of Kansas Natural History Museum.

Results and Data Availability

taxname	accession	specimen_voucher
Aix galericulata	JBNFIQ000000000	FMNH:508485
Aix sponsa	JAUPTN000000000	ANSP:tissue:36537
Anas gibberifrons	JBPULJ000000000	UWBM:Bird:62869
Anas melleri	JBPPPJ000000000	FMNH:Birds:409391
Anser albifrons	JBNFIR000000000	ANSP:skin:194029
Anser anser	JBNFIT000000000	UAM:Bird:18099
Anser caerulescens	JBNTGS000000000	ANSP:skin:203171
Anser canagicus	JBPULH000000000	UAM:Bird:42714
Anser erythropus	JBNTFW000000000	UAM:Bird:6518
Anser indicus	JBNPVO000000000	UAM:Bird:18079
Anser rossii	JBNQTT000000000	ANSP:skin:193934
Aythya affinis	JBPPPB000000000	ANSP:skin:208005
Aythya americana	JBMAII000000000	ANSP:skin:192179
Aythya collaris	JBNFIU000000000	ANSP:skin:209313
Aythya fuligula	JBNFNR000000000	UAM:Bird:26103
Aythya innotata	JBPGWF000000000	FMNH:Birds:360032
Aythya novaeseelandiae	JBPJWA000000000	UWBM:Bird:80397

taxname	accession	specimen_voucher
<i>Aythya nyroca</i>	JBPPPC000000000	UWBM:Bird:46236
<i>Biziura lobata</i>	JBPGWE000000000	UAM:Bird:11882
<i>Branta bernicla</i>	JBPAUL000000000	ANSP:skin:208293
<i>Branta canadensis</i>	JBNFIV000000000	FMNH:509057
<i>Branta hutchinsii</i>	JAUPTO000000000	ANSP:tissue:28730
<i>Branta ruficollis</i>	JBMAHH000000000	ANSP:skin:192635
<i>Branta sandvicensis</i>	JBPJWB000000000	ANSP:skin:207558
<i>Bucephala clangula</i>	JBNWUP000000000	ANSP:skin:207736
<i>Cairina moschata</i>	JBNFIS000000000	ANSP:skin:188272
<i>Callonetta leucophrys</i>	JBMAIJ000000000	UF:Birds:45407
<i>Chauna torquata</i>	JBPKJJ000000000	UAM:Bird:13305
<i>Chloeophaga hybrida</i>	JBMAHD000000000	MMNH:Bird:42140
<i>Chloeophaga poliocephala</i>	JBPPPL000000000	UAM:Bird:36891
<i>Clangula hyemalis</i>	JBNLHY000000000	ANSP:skin:203316
<i>Cygnus buccinator</i>	JBOBQF000000000	UAM:Bird:48791
<i>Cygnus columbianus</i>	JBMAIK000000000	ANSP:skin:203246
<i>Cygnus cygnus</i>	JBPGNO000000000	UAM:Bird:6909
<i>Cygnus olor</i>	JBNWUQ000000000	UWBM:bird:56585
<i>Dendrocygna arborea</i>	JBMAIB000000000	MMNH:Bird:42302
<i>Dendrocygna arcuata</i>	JBNVBT000000000	ANSP:skin:192530
<i>Dendrocygna autumnalis</i>	JBMAHG000000000	ANSP:skin:205246
<i>Dendrocygna bicolor</i>	JBPGNW000000000	UWBM:Bird:89977
<i>Dendrocygna eytoni</i>	JBPGUY000000000	UWBM:Bird:89977
<i>Dendrocygna viduata</i>	JBPGWL000000000	UAM:Bird:14786
<i>Heteronetta atricapilla</i>	JBPGNQ000000000	UAM:Bird:19754
<i>Lophodytes cucullatus</i>	JBMAIL000000000	ANSP:skin:206932
<i>Mareca strepera</i>	JAXCLN000000000	ANSP:skin:193939
<i>Melanitta americana</i>	JBMAIP000000000	ANSP:skin:209256
<i>Melanitta deglandi</i>	JBPPPF000000000	ANSP:skin:192818
<i>Melanitta nigra</i>	JBLTIL000000000	ANSP:skin:192712
<i>Merganetta armata</i>	JBPGNP000000000	UAM:Bird:17506
<i>Mergellus albellus</i>	JBNWVG000000000	UAM:Bird:25999
<i>Mergus merganser</i>	JBMAIO000000000	ANSP:skin:208007
<i>Mergus squamatus</i>	JBPGNR000000000	UWBM:Bird:71828
<i>Netta peposaca</i>	JBPGNT000000000	UAM:Bird:19694
<i>Nettapus pulchellus</i>	JBMAIM000000000	ANSP:skin:192488
<i>Nomonyx dominicus</i>	JBPGNV000000000	UAM:Bird:14785
<i>Oxyura jamaicensis</i>	JBMAIN000000000	ANSP:skin:203312
<i>Oxyura vittata</i>	JBPGWG000000000	UAM:Bird:17534
<i>Polysticta stelleri</i>	JBPPPG000000000	UAM:Bird:7764
<i>Radjah radjah</i>	JBPBUE000000000	ANSP:skin:192491
<i>Sarkidiornis melanotos</i>	JBPRLG000000000	FMNH:Birds:467841
<i>Sarkidiornis sylvicola</i>	JBMAHI000000000	ANSP:skin:186047
<i>Somateria fischeri</i>	JBPGNS000000000	UAM:Bird:30720
<i>Somateria mollissima</i>	JBNWUN000000000	ANSP:skin:191715
<i>Somateria spectabilis</i>	JBPGNU000000000	UAM:Bird:13153
<i>Spatula cyanoptera</i>	JBPPPD000000000	UAM:Bird:19315
<i>Spatula hottentota</i>	JBPPPH000000000	FMNH:REW675
<i>Spatula platalea</i>	JBPGNX000000000	UAM:Bird:19315
<i>Stictonetta naevosa</i>	JBMDMI000000000	UAM:Bird:19315

taxname	accession	specimen_voucher
Tadorna cana	JBQPGR000000000	UAM:Bird:19315
Tadorna cristata	JBMBTY000000000	NHMD:916127
Tadorna ferruginea	JBQPFV000000000	UAM:Bird:17543
Tadorna tadorna	JBPBUW000000000	UWBM:Bird:56439
Tadorna tadornoides	JBMBRP000000000	KU:Birds:134412
Tadorna variegata	JBMBRR000000000	KU:Birds:114994

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