Supplementary data

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First vertebrate assemblage of the Early Holocene from northeastern (Mesopotamian region) of Argentina

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Figure S1. Plot showing the radiocarbon 14C data of 9990 ± 140 BP 14C BP (LP-3060) for the base of analyzed stratigraphic section in Doll creek, as well as the 94.5% probability calibrated age range and the ShCal13 curve for the southern hemisphere (data provided for LATYR).



Appendix S1. List of specimens by taxon used as comparison in this work.

# Fish

**Characiformes.** CICYTTP-P-V-01 *Pigocentrus nattereri;* CICYTTP-P-V-04 *Raphiodon vulpinus;* CICYTTP-P-V-07 *Salminus brasiliensis;* CICYTTP-P-V-09 *Hoplias malabaricus;* CICYTTP-P-V-10 *Piaractus mesopotamicus*; CICYTTP-P-V-11 *Astyanax asuncionensis*; CICYTTP-P-V-12 *Triportheus nematurus*; CICYTTP-P-V-13 *Leporinus obtusidens;* CFA-IC-209 *Cheirodon interruptus*; CFA-IC-215; *Cheirodon interruptus*; CFA-IC-216 *Cheirodon interruptus*; CFA-IC-7641 *Oligosarcus jenynsii*; CFA-IC-7642 *Oligosarcus jenynsii*; CFA-IC-7644 *Cynopotamus argenteus*; CFA-IC-7645 *Roeboides microlepis*; CFA-IC-7646 *Cynopotamus argenteus*; CFA-IC-7651 *Bryconamericus iheringii*.

**Atherniformes.** CICYTTP-P-V-03 *Odontesthes bonariensis*

**Perciformes.** CICYTTP-P-V-08 *Micropogonias furnieri*

**Siluriformes.**CICYTTP-P-V-02 *Pimelodus maculatus;* CICYTTP-P-V-05 *Parapimelodus valenciennis*; CICYTTP-P-V-15 *Rhamdia quelen;* CICYTTP-P-V-06 *Trachelyopterus* sp.; CICYTTP-P-V-14 *Trachelyopterus lucenai*; CICYTTP-P-V-16 *Ageneiosus militaris*; CICYTTP-P-V-17 *Corydoras aerens*; CICYTTP-P-V-19 *Megalechis thoracata;* CICYTTP-P-V-20 *Lepthoplosternum pectoral;* CFA-IC-8451 *Rhamdia quelen*; CFA-IC-8459 *Pimelodella gracilis*; CFA-IC-8460 *Pimelodella gracilis*; CFA-IC-8461 *Pimelodella gracilis*; CFA-IC-8523 *Pimelodella laticeps*; CFA-IC-8524 *Heptapterus mustelinus*; CFA-IC-8561 *Pimelodella laticeps*; CFA-IC-8562 *Pimelodella gracilis*; CFA-IC-8563 *Pimelodella gracilis*; CFA-IC-8564 *Pimelodella gracilis*; CFA-IC-8565 *Pimelodella gracilis*; CFA-IC-8566 *Pimelodella gracilis*; CFA-IC-8567 *Pimelodella taenioptera*; CFA-IC-9421 *Pimelodella gracilis*; CFA-IC-9423 *Pimelodella gracilis*; CFA-IC-8469 *Otocinclus arnoldi*; CFA-IC-8470 *Hypoptopoma inexpectata*; CFA-IC-8515 *Pterygoplichthys anisitsi*; CFA-IC-8520 *Loricariichthys anus*; CFA-IC-8894 *Rineloricaria parva*; CFA-IC-9208 *Loricariichthys anus*; CFA-IC-9269 *Loricariichthys platymetopon*.

**Lepidosireniformes.** CICYTTP-P-V-18 *Lepidosiren paradoxa*.

**Perciformes.** CFA-IC-3901 *Australoheros facetus*; CFA-IC-7614 *Crenicichla scottii*; CFA-IC-7615 *Crenicichla scottii*; CFA-IC-7616 *Crenicichla scottii*; CFA-IC-7617 *Crenicichla scottii;* CFA-IC-7619 *Australoheros facetus*; CFA-IC-7647 *Crenicichla scottii*; CFA-IC-7657 *Crenicichla scottii*; CFA-IC-7680 *Australoheros facetus*; CFA-IC-7687 *Cichlasoma dimerus*; CFA-IC-8193 *Gymnogeophagus australis*; CFA-IC-8985 *Astronotus ocellatus*; CFA-IC-9032 *Cichlasoma dimerus*; CFA-IC-9033 *Cichlasoma dimerus*; CFA-IC-9149 *Geophagus brasiliensis*; CFA-IC-9313 *Crenicichla lepidota*; CFA-IC-12600 *Gymnogeophagus meridionalis*.

**Cyprinodontiformes.** CFA-IC-7649 *Jenynsia lineata*; CFA-IC-8331 *Jenynsia lineat*a; CFA-IC-8414 *Jenynsia lineata*; CFA-IC-8446 *Jenynsia lineata*; CFA-IC-9394 *Jenynsia lineata*; CFA-IC-8451

**Anurans**

**Ceratophryidae.** FCEyN1015(1) *Ceratophrys cranwelli;* FCEyN1015(2) *Ceratophrys cranwelli;* FCEyN 1015(3) *Ceratophrys cranwelli;* FCEyN1015(4) *Ceratophrys cranwelli;* FCEyN1015(5)*Ceratophrys cranwelli;* FCEyN1015(6)*Ceratophrys cranwelli;* FCEyN 1015(7) *Ceratophrys cranwelli;* FCEyN1015(8) *Ceratophrys cranwelli;* FCEyN 1015(9) *Ceratophrys cranwelli;* FCEyN665(2) *Ceratophrys cranwelli;* FCEyN665(3) *Ceratophrys cranwelli;* FCEyN665(4) *Ceratophrys cranwelli;* FCEyN*1882(9) Ceratophrys cornuta;* FCEyN*1051(2) Ceratophrys cornuta;* FCEyN*1580 Ceratophrys cornuta;* FCEyN221 *Ceratophrys cornuta;* FCEyN*306 Lepidobatrachusasper;* FCEyN439(1) *Lepidobatrachus asper;* FCEyN439(2*) Lepidobatrachus asper;* FCEyN *261(1) Lepidobatrachus asper;* FCEyN360(1) *Lepidobatrachus asper;* FCEyN*360(2) Lepidobatrachus asper;* FCEyN360(3) *Lepidobatrachus asper;* FCEyN319 *Lepidobatrachus leavis;* FCEyN1442 *Lepidobatrachus leavis;* FCEyN1443 *Lepidobatrachus leavis;* FCEyN1293 *Lepidobatrachus llanensis;* FCEyN1293(1) *Lepidobatrachus llanensis;* FCEyN1293(2) *Lepidobatrachus llanensis;*FCEyN1293(3) *Lepidobatrachus llanensis.*

**Leptodactylidae.** FCEyN1525 *Leptodactylus gracilis;*CFA-AN-137 *Leptodactylus gracilis;* FCEyN283(2) *Leptodactylus latrans;* FCEyN1931 *Leptodactylus latrans;* CFA-AN-131 *Leptodactylus latrans;* CFA-AN-128*Leptodactylus latrans;* CFA-AN-185 *Leptodactylus latrans;* FCEyN113 *Leptodactylus mystacinus;* FCEyN1899 *Pseudopaludicola falcipes;* FCEyN 1212 *Pseudopaludicola falcipes;* FCEyN1212 *Pseudopaludicola falcipes;* CICYTTP-ZV-An-008 *Physalaemus rionegrensis*; CICYTTP-ZV-An-009 *Leptodactylus latrans*; CICYTTP-ZV-An-010 *Leptodactylus latrans*.

## **Odontophrynidae.** FCEyN1284(1) *Odontophrynusamericanus;* FCEyN 1284(2) *Odontophrynus americanus;* FCEyN1286(1) *Odontophrynus americanus;* FCEyN1286(2) *Odontophrynus americanus;* FCEyN 1295(2) *Odontophrynus americanus;* FCEyN1439(1) *Odontophrynus americanus;* FCEyN 781(13) *Odontophrynus americanus;* FCEyN 781(15) *Odontophrynus americanus;* FCEyN781(19) *Odontophrynus americanus;* FCEyN781(20) *Odontophrynus americanus;* FCEyN 781(6) *Odontophrynus americanus;* FCEyN781(7) *Odontophrynus americanus;* FCEyN 781(8) *Odontophrynus americanus;* FCEyN1285(1) *Odontophrynus cordobae;* FCEyN 1285(2) *Odontophrynus cordobae;* FCEyN1096(1) *Odontophrynus lavillai;* FCEyN 1096(2) *Odontophrynus lavillai;* FCEyN1096(3) *Odontophrynus lavillai;* FCEyN1096(5) *Odontophrynus lavillai;* FCEyN1096(8) *Odontophrynus lavillai;* FCEyN365(14) *Odontophrynus lavillai;* FCEyN365(15) *Odontophrynus lavillai;* FCEyN365(2) *Odontophrynus lavillai;* FCEyN365(3) *Odontophrynus lavillai;* FCEyN365(5) *Odontophrynus lavillai;* FCEyN1218(1) *Odontophrynus lavillai;* FCEyN 699 *Proceratophrys boiei.*

**Hylidae.** FCEyN1955(B96) *Pseudis minuta;* FCEyNB97 *Pseudis* sp.; FCEyN1929(1) *Scinax acuminatus;* FCEyN1929(2) *Scinax acuminatus;* CFA-AN-291 *Scinax granulatus;* CFA-AN-279 *Scinax granulatus;* CFA-AN-286 *Scinax granulatus;* FCEyN 1863 *Scinax squalirostris;* CFA-AN-228 *Boana pulchellus;* CFA AN-127*Boana pulchellus;* CFA AN-227 *Boana pulchellus;* CFA AN-229 *Boana pulchellus;* CFA-AN-276 *Boana pulchellus;* CFA-AN-273 *Boana pulchellus;* CICYTTP-ZV-An-027 *Scinax squalirostris*.

**Bufonidae.** FCEyN636 *Rhinella arenarum;* FCEyN1109 *Rhinella arenarum;* CFA-AN-298 *Rhinella arenarum;* CFA-AN-304 *Rhinella arenarum;* CFA-AN-277 *Rhinella arenarum;* CFA-AN-318 *Rhinella arenarum;* CFA-AN-37 *Rhinella arenarum;* FCEyN 1929(2) *Rhinella d'orbigny;* FCEyN 1929(1) *Rhinella d'orbigny;* CFA-AN-271*Rhinella fernandezae;* CFA-AN-307 *Rhinella fernandezae;* CFA-AN-109 *Rhinella fernandezae;* CFA-AN-311 *Rhinella fernandezae;* CFA-AN-269 *Rhinella fernandezae;* CFA-AN-035 *Rhinella fernandezae;* CFA-AN-303 *Rhinella fernandezae;* FCEyN 20 *Rhinella ictérica;* FCEyN 352 *Rhinella schneideri;* FCEyN 664 *Rhinella schneideri;* FCEyN 795 *Rhinella schneideri;* FCEyN B-61 *Rhinella schneideri;* FCEyN B-32 *Rhinella schneideri;* FCEyN B-33 *Rhinella schneideri;* CFA-AN-126 *Rhinella schneideri;* CFA-AN-38 *Rhinella schneideri;* CFA-AN-39 *Rhinella schneideri;* CICYTTP-ZV-An-019, *Rhinellla arenarum*; CICYTTP-ZV-An-020 *Rhinella diptycha* (*Rhinella schneideri*); CICYTTP-ZV-An-021 *Rhinella diptycha* (*Rhinella schneideri*); CICYTTP-ZV-An-022 *Rhinella diptycha* (*Rhinella schneideri*); CICYTTP-ZV-An-023 *Rhinella dorbignyi* (*Rhinella fernanadezae*); CICYTTP-ZV-An-006 *Rhinella fernandezae*; CICYTTP-ZV-An-007 *Rhinella fernandezae.*

**Reptiles**

UNMdP-O-1 *Tupinambis merianae*; UNMdP-O-2 *Tupinambis merianae*; UNMdP-O-3 *Tupinambis merianae*; UNMdP-O-4 *Tupinambis merianae*; UNMdP-O-5 *Tupinambis merianae*; UNMdP-O-10 *Tupinambis merianae*; UNMdP-O-11 *Tupinambis merianae*; UNMdP-O-12 *Tupinambis merianae*; UNMdP-O-13 *Tupinambis merianae*; UNMdP-O-14 *Tupinambis merianae*; UNMdP-O-15 *Teius teyou*; UNMdP-O-16 *Teius teyou*; UNMdP-O-17 *Tupinambis merianae*; UNMdP-O-18 *Tupinambis merianae*; UNMdP-O-19 *Tupinambis merianae*; UNMdP-O-20 *Tupinambis merianae*; UNMdP-O-21 *Tropidurus spinulosus*; UNMdP-O-22 *Teius teyou*; UNMdP-O-23 *Teius teyou*; UNMdP-O-24 *Tupinambis merianae*; UNMdP-O-25 *Tupinambis merianae*; UNMdP-O-26 *Tupinambis merianae*; UNMdP-O-27 *Ameiva ameiva*; UNMdP-O-28 *Tupinambis merianae*; UNMdP-O-29 *Iguana iguana*; UNMdP-O-30 *Iguana iguana*; UNMdP-O-31 *Philodryas baroni*; UNMdP-O-32 *Tupinambis merianae*; UNMdP-O-33 *Tupinambis merianae*; UNMdP-O-34 *Tupinambis merianae*; UNMdP-O-35 *Tupinambis merianae*; UNMdP-O-36 *Tupinambis rufescens*; UNMdP-O-37 *Iguana iguana*; UNMdP-O-38 *Philodryas baroni*; UNMdP-O-39 *Amphisbaena prunicolor*; UNMdP-O-40 *Teius teyou*; UNMdP-O-41 *Tupinambis rufescens*; UNMdP-O-42 *Epicrates alvarezi*; UNMdP-O-43 *Epicrates alvarezi*; UNMdP-O-44 *Boa constrictor*; UNMdP-O-45 *Boa constrictor*; UNMdP-O-46 *Boa constrictor*; UNMdP-O-47 *Boa constrictor*; UNMdP-O-48 *Eunectes notaeus*; UNMdP-O-49 *Boa constrictor*; UNMdP-O-50 *Boa constrictor*; UNMdP-O-51 *Cnemidophorus longicaudus*; UNMdP-O-52 *Cnemidophorus longicaudus*; UNMdP-O-53 *Teius oculatus*; UNMdP-O-54 *Hydrodynastes gigas*; UNMdP-O-55 *Phylodryas patagoniensis*; UNMdP-O-56 *Phylodryas patagoniensis*; UNMdP-O-57 *Helicops leopardinus*; UNMdP-O-58 *Oxyrhopus rhombifer*; UNMdP-O-59 *Lystrophis d´orbigny*; UNMdP-O-60 *Lystrophis d´orbigny*; UNMdP-O-61 *Liophis anomalus*; UNMdP-O-62 *Leimadophis poecilogyrus*; UNMdP-O-63 *Lystrophis d´orbigny*; UNMdP-O-64 *Philodryas patagoniensis*; UNMdP-O-65 *Clelia rustica*; UNMdP-O-66 *Ophiodes vertebralis*; UNMdP-O-67; UNMdP-O-67 *Phymaturus palluma*; UNMdP-O-68 *Pristidactylus nigroiugulus*; UNMdP-O-69 *Tropidurus catalanensis*; UNMdP-O-70 *Diplolaemus bibroni*; UNMdP-O-71 *Diplolaemus darwinii*; UNMdP-O-72 *Cercosaura schreibersii*; UNMdP-O-73 *Polychrus acutirostris*; UNMdP-O-74 *Tupinambis rufescens*; UNMdP-O-75 *Tupinambis merianae*; UNMdP-O-76 *Liolaemus multimaculatus*; UNMdP-O-77 *Tropidurus spinulosus*; UNMdP-O-78 *Rhincocerophis alternatus*; UNMdP-O-79; UNMdP-O-80 *Cnemidophorus lacertoides*; UNMdP-O-81 *Cnemidophorus longicauda*; UNMdP-O-82 *Cnemidophorus serranus*; UNMdP-O-83 *Cnemidophorus tergolaevigatus*; UNMdP-O-84 *Teius suquiensis*; UNMdP-O-85 *Teius suquiensis*; UNMdP-O-86 *Liolaemus argentinus*; UNMdP-O-87 *Liolaemus argentinus*; UNMdP-O-88 *Liolaemus argentinus*; UNMdP-O-89 *Liolaemus argentinus*; UNMdP-O-90 *Liolaemus argentinus*; UNMdP-O-91 *Liolaemus argentinus*; UNMdP-O-92 *Liolaemus argentinus*; UNMdP-O-93 *Liolaemus argentinus*; UNMdP-O-94 *Liolaemus argentinus*; UNMdP-O-95 *Liolaemus argentinus*; UNMdP-O-96 *Liolaemus argentinus*; UNMdP-O-97 *Liolaemus elongatus*; UNMdP-O-98 *Liolaemus elongatus*; UNMdP-O-99 *Liolaemus elongatus*; UNMdP-O-100 *Liolaemus elongatus*; UNMdP-O-101 *Liolaemus elongatus*; UNMdP-O-102 *Liolaemus elongatus*; UNMdP-O-103 *Liolaemus elongatus*; UNMdP-O-104 *Liolaemus elongatus*; UNMdP-O-105 *Liolaemus elongatus*; UNMdP-O-106 *Liolaemus elongatus*; UNMdP-O-107 *Liolaemus bibroni*; UNMdP-O-108 *Liolaemus bibroni*; UNMdP-O-109 *Liolaemus bibroni*; UNMdP-O-110 *Liolaemus boulengeri*; UNMdP-O-111 *Liolaemus lineomaculatus*; UNMdP-O-112 *Liolaemus melanops*; UNMdP-O-113 *Liolaemus melanops*; UNMdP-O-114 *Liolaemus melanops*; UNMdP-O-115 *Liolaemus darwini*; UNMdP-O-116 *Liolaemus darwini*; UNMdP-O-117 *Liolaemus gracilis*; UNMdP-O-118 *Liolaemus gracilis*; UNMdP-O-119 *Liolaemus petrophilus*; UNMdP-O-120 *Liolaemus petrophilus*; UNMdP-O-121 *Liolaemus poecilochromus*; UNMdP-O-122 *Liolaemus poecilochromus*; UNMdP-O-123 *Liolaemus rothi*; UNMdP-O-124 *Liolaemus somuncurae*; UNMdP-O-125 Phymaturus somuncurensis; UNMdP-O-126 *Phymaturus somuncurensis*; UNMdP-O-127 *Tropidurus* sp.; UNMdP-O-128 *Stenocercus* sp.; UNMdP-O-129 *Stenocercus* sp.; UNMdP-O-130 *Stenocercus pectinatus*; UNMdP-O-131 *Polychrus acutirostris*?; UNMdP-O-132 *Diplolaemus bibroni*; UNMdP-O-133 *Diplolaemus darwini*; UNMdP-O-134 *Leiosaurus* sp.; UNMdP-O-135 *Leiosaurus belli*; UNMdP-O-136 *Leiosaurus belli*; UNMdP-O-137 *Pristidactylus achalensis*; UNMdP-O-138 *Pristidactylus araucanus*; UNMdP-O-139 *Anisolepis* sp.; UNMdP-O-140 *Anisolepis grilli*; UNMdP-O-141 *Enyalius iheringii*; UNMdP-O-142 *Urostrophus* sp.; UNMdP-O-143 *Epictia munoai*; CICYTTP-ZV-R-011 *Salvator* *merianae*; CICYTTP-ZV-R-012 *Teius ocellatus*; CICYTTP-ZV-R-013 *Teius ocellatus*; CICYTTP-ZV-R-014 *Aspronema dorsovittatum*; CICYTTP-ZV-R-015 *Aspronema dorsovittatum*; CICYTTP-ZV-R-016 *Chironius maculoventris*; CICYTTP-ZV-R-017 *Parapimophis rusticus*; CICYTTP-ZV-R-018 *Bothrops alternatus*; CICYTTP-ZV-R-001 *Epictia albipuncta*; CICYTTP-ZV-R-002 *Epictia albipuncta*; CICYTTP-ZV-R-003 *Epictia albipuncta*; CICYTTP-ZV-R-004 *Amerotyphlops brongersmianus*; CICYTTP-ZV-R-005 *Amerotyphlops brongersmianus*; CICYTTP-ZV-R-024 *Amphisbaena angustifrons*; CICYTTP-ZV-R-025 *Amphisbaena angustifrons*; CICYTTP-ZV-R-026 *Amphisbaena angustifrons*.

# Aves

**Passeriformes (PA).**CICYTTP-ZV-APA-015 *Cardinalis cardinalis;* CICYTTP-ZV-APA-020 *Saltator coerulescens;* CICYTTP-ZV-APA-161 *Saltator similis;* CICYTTP-ZV-APA-191 *Saltator ¿?;* CICYTTP-ZV-APA-032 *Cyanocorax chrysops;* CICYTTP-ZV-APA-033 *Cyanocorax chrysops*; CICYTTP-ZV-APA-207 *Cyanocorax chrysops*; CICYTTP-ZV-APA-139 *Ammodramus humeralis*; CICYTTP-ZV-APA-024 *Zonotrichia capensis;* CICYTTP-ZV-APA-132 *Zonotrichia capensis;* CICYTTP-ZV-APA-210 *Sporagra magellanica;* CICYTTP-ZV-APA-113 *Chamaeza campanisona;* CICYTTP-ZV-APA-010 *Asthenes pyrrholeuca;* CICYTTP-ZV-APA-011 *Furnarius rufus;* CICYTTP-ZV-APA-012 *Furnarius rufus;* CICYTTP-ZV-APA-208*Furnarius rufus;* CICYTTP-ZV-APA-209 *Furnariu srufus;* CICYTTP-ZV-APA-194 *Lepidocolaptes angustirostris;* CICYTTP-ZV-APA-013 *Phleocrypte smelanops;* CICYTTP-ZV-APA-157 *Phleopcryptes melanops;* CICYTTP-ZV-APA-008 *Pseudoseisura cristata;* CICYTTP-ZV-APA-009 *Pseudoseisura cristata*; CICYTTP-ZV-APA-109 *Pseudoseisura lophotes;* CICYTTP-ZV-APA-006 *Sclerurus scansor*; CICYTTP-ZV-APA-160 *Synallaxis* sp.; CICYTTP-ZV-APA-014 *Syndactylaru fosuperciliata;* CICYTTP-ZV-APA-005 *Xiphorhynchus fuscus;* CICYTTP-ZV-APA-112 *Xiphocolaptes major;* CICYTTP-ZV-APA-150 *Tachycineta leucorrhoa;* CICYTTP-ZV-APA-190 *Tachycineta meyeni;* CICYTTP-ZV-APA-029 *Agelaiiceuoides badius;* CICYTTP-ZV-APA-026 *Agelasticus thilius;* CICYTTP-ZV-APA-027 *Agelasticus thilius;* CICYTTP-ZV-APA-154 *Amblyramphus holosers;* CICYTTP-ZV-APA-202 *Amblyramphus holosericeus;* CICYTTP-ZV-APA-025 *Gnorimops archopi;* CICYTTP-ZV-APA-110 *Molothrus bonariensis;* CICYTTP-ZV-APA-140 *Molothrus bonariensis;*CICYTTP-ZV-APA-030 *Mimuspatagonicus;* CICYTTP-ZV-APA-031 *Mimu saturninus;* CICYTTP-ZV-APA-111 *Mimus saturninus;* CICYTTP-ZV-APA-162 *Mimus saturninus;* CICYTTP-ZV-APA-163 *Mimus saturninus;* CICYTTP-ZV-APA-001 *Anthus lutescens;* CICYTTP-ZV-APA-138 *Geothlypis aequinoctialis;* CICYTTP-ZV-APA-200 *Passer domesticus;* CICYTTP-ZV-APA-201 *Passer domesticus;* CICYTTP-ZV-APA-004 *Thamnophilus caerulescens;* CICYTTP-ZV-APA-151 *Embernagra platensis*; CICYTTP-ZV-APA-021 *Phrygilus fruticeti;* CICYTTP-ZV-APA-022 *Phrygilus fruticeti;* CICYTTP-ZV-APA-131*Sicalis luteola;* CICYTTP-ZV-APA-147 *Sporophila caerulescens;* CICYTTP-ZV-APA-159 *Sporophila caerulescens;* CICYTTP-ZV-APA-146 *Thraupis bonariensis;* CICYTTP-ZV-APA-149 *Thraupis sayaca;* CICYTTP-ZV-APA-002 *Troglodytes musculus;* CICYTTP-ZV-APA-135 *Troglodytes musculus*

CICYTTP-ZV-APA-136 *Troglodytes musculus;* CICYTTP-ZV-APA-137 *Troglodytes musculus;* CICYTTP-ZV-APA-003 *Turdus albicollis;* CICYTTP-ZV-APA-141 *Turdus amaurochalinus;* CICYTTP-ZV-APA-188 *Turdus amaurochalinus;* CICYTTP-ZV-APA-142 *Turdus rufiventris;* CICYTTP-ZV-APA-143 *Turdus rufiventris;* CICYTTP-ZV-APA-192 *Turdus rufiventris;* CICYTTP-ZV-APA-158 *Camptostoma obsoletum;* CICYTTP-ZV-APA-148 *Machetornisrixosus;* CICYTTP-ZV-APA-016 *Myiarchus swainsoni;* CICYTTP-ZV-APA-017*Pitangus sulphuratus;* CICYTTP-ZV-APA-144 *Pitangus sulphuratus;* CICYTTP-ZV-APA-145 *Pitangus sulphuratus;* CICYTTP-ZV-APA-193 *Pseudocolopteryx acutipennis;* CICYTTP-ZV-APA-152 *Tyrannus savana*; CICYTTP-ZV-APA-018 *Tyrannus tyrannus;* CICYTTP-ZV-APA-019 *Xolmis irupero;*CICYTTP-ZV-APA-134 *Vireo olivaceus.*

**Psittaciformes (PS).** CICYTTP-ZV-APS-049 *Cacatua galerita;* CICYTTP-ZV-APS-050 *Cacatua galerita;* CICYTTP-ZV-APS-040 *Amazona aestiva;* CICYTTP-ZV-APS-041 *Amazona aestiva;* CICYTTP-ZV-APS-044 *Ara ararauna*; CICYTTP-ZV-APS-045 *Ara nobilis;* CICYTTP-ZV-APS-046 *Brotogeristirica;* CICYTTP-ZV-APS-036 *Cyanoliseus patagonus;* CICYTTP-ZV-APS-037 *Cyanoliseus patagonus;* CICYTTP-ZV-APS-038 *Cyanoliseus patagonus;* CICYTTP-ZV-APS-039 *Cyanoliseus patagonus;* Sobre. LL E3. *Cyanoliseus patagonus;* CICYTTP-ZV-APS-196*Melopsittacus undulates;* CICYTTP-ZV-APS-034 *Nandayus nenday;* CICYTTP-ZV-APS-035 *Nandayus nenday;* CICYTTP-ZV-APS-042 *Neopsephotus bourkii;* CICYTTP-ZV-APS-043 *Platycercus* sp.; CICYTTP-ZV-APS-047 *Pionus maximiliani;* CICYTTP-ZV-APS-048 *Pyrrhura perlata;* CICYTTP-ZV-APS-123 Psittacidae indet.

**Columbiformes (CO).**CICYTTP-ZV-ACO-056 *Columba picazuro;* CICYTTP-ZV-ACO-053 *Columba* sp.; CICYTTP-ZV-ACO-054 *Columba* sp.; CICYTTP-ZV-ACO-055 *Columba* sp.; CICYTTP-ZV-ACO-198 *Columbina picui;* CICYTTP-ZV-ACO-199 *Columbina picui;* Tubito. 24. *Columbina* sp.; Tubito. 1. *Columbina picui;* CICYTTP-ZV-ACO-052 *Columbina talpacoti;* CICYTTP-ZV-ACO-051*Zenaida auriculata;* CICYTTP-ZV-ACO-116 *Zenaida auriculata;* CICYTTP-ZV-ACO-117 *Zenaida auriculata;* Tubito. 14. *Zenaida auriculata.*

**Charadriiformes (CH).**

CICYTTP-ZV-ACH-057 *Larus dominicanus;* CICYTTP-ZV-ACH-204 *Larus dominicanus;* CICYTTP-ZV-ACH-181 *Larus* sp.; CICYTTP-ZV-ACH-130 *Philomachus pugnax;* CICYTTP-ZV-ACH-129 *Tringane bularia;* CICYTTP-ZV-ACH-128 *Tringato tanus;* CICYTTP-ZV-ACH-058 *Sterna* sp.; CICYTTP-ZV-ACH-060 *Thinocorus orbignyianus;* CICYTTP-ZV-ACH-059 *Thinocorus rumicivorus.*

**Anseriformes (AN).** CICYTTP-ZV-AAN-062 *Amazoneta brasiliensis;* CICYTTP-ZV-AAN-064 *Chloephaga* sp.; CICYTTP-ZV-AAN-063 *Dendrocygna viduata;* CICYTTP-ZV-AAN-061 Anatidae indet.

**Gruiformes (GR).** CICYTTP-ZV-AGR-077*Aramus guarauna;* CICYTTP-ZV-AGR-079*Anthropoides virgo;* CICYTTP-ZV-AGR-078*Balearica*sp.; CICYTTP-ZV-AGR-083*Aramidesypecaha;* CICYTTP-ZV-AGR-084*Fulicarufifrons;* CICYTTP-ZV-AGR-082*Fulica*sp.; CICYTTP-ZV-AGR-080*Gallinulachloropus;* CICYTTP-ZV-AGR-081*Porphyiriomartinica;* CICYTTP-ZV-AGR-195*Pardirallusmaculatus;* CICYTTP-ZV-AGR-180*Pardirallussanguinolentus*; CICYTTP-ZV-AGR-126 Rallidaeindet; MFA O.523 *Gallinulachlorophus galeata.*

**Strigiformes (ST).**CICYTTP-ZV-AST-088 *Asio clamator;* CICYTTP-ZV-AST-086 *Athene cunicularia;* CICYTTP-ZV-AST-102 *Athene cunicularia;* CICYTTP-ZV-AST-167 *Athene cunicularia;* CICYTTP-ZV-AST-087 *Otus choliba;* CICYTTP-ZV-AST-120 Strigidae?; CICYTTP-ZV-AST-085 *Bubo virginianus;* CICYTTP-ZV-AST-165 *Tyto alba;* CICYTTP-ZV-AST-166 *Tyto alba.*

**Galliformes (GA).** CICYTTP-ZV-AGA-090 *Mitu tuberosa;* CICYTTP-ZV-AGA-089*Colinus virginianus.*

**Phoenicopteriformes (PH).** CICYTTP-ZV-APH-091 *Phoeniconaias minor*

**Piciformes (PI).** CICYTTP-ZV-API-186 *Colaptes campestris;* CICYTTP-ZV-API-115 *Colaptes melanochloros;* CICYTTP-ZV-API-187 *Colaptes melanochloros;* CICYTTP-ZV-API-092 *Ramphastos toco;* CICYTTP-ZV-API-122 Ramphastidae indet.

**Podicipediformes (PO).** CICYTTP-ZV-APO-093 *Podiceps major;* CICYTTP-ZV-APO-094 *Podiceps major;* CICYTTP-ZV-APO-097 *Podiceps rolland*; CICYTTP-ZV-APO-174 *Podiceps rolland;* CICYTTP-ZV-APO-095 *Podilymbus podiceps;* CICYTTP-ZV-APO-096*Podilymbus podiceps.*

**Procellariiformes (PR).** CICYTTP-ZV-APR-098 *Macronectes giganteus;* CICYTTP-ZV-APR-156 Puffinus?; CICYTTP-ZV-APR-118 Procelariidae indet.; CICYTTP-ZV-APR-119 Procelariidae indet.

**Ciconiiformes (CI).** CICYTTP-ZV-ACI-177 *Ardea alba;* CICYTTP-ZV-ACI-070 *Ardea alba;* CICYTTP-ZV-ACI-176 *Ardea cocoi;* CICYTTP-ZV-ACI-069 *Bubulcus ibis;* CICYTTP-ZV-ACI-065 *Nycticorax nycticorax;* CICYTTP-ZV-ACI-066 *Nycticorax nycticorax;* CICYTTP-ZV-ACI-067 *Nycticorax nycticorax;* CICYTTP-ZV-ACI-068 Ardeidae indet.; CICYTTP-ZV-ACI-099*Coragyps atratus;* CICYTTP-ZV-ACI-076*Ciconia maguari;* CICYTTP-ZV-ACI-171 *Ciconia maguari;* CICYTTP-ZV-ACI-172 *Ciconia maguari;* CICYTTP-ZV-ACI-179*Ciconia maguari;* CICYTTP-ZV-ACI-182*Ciconia maguari*; CICYTTP-ZV-ACI-073 *Jabiru mycteria;* CICYTTP-ZV-ACI-074 *Jabiru mycteria;* CICYTTP-ZV-ACI-170 *Leptoptilos crumeniferus;* CICYTTP-ZV-ACI-075 *Mycteria americana;* CICYTTP-ZV-ACI-072 *Eudocimus ruber;* CICYTTP-ZV-ACI-071 *Platalea ajaja*.

**Falconiformes (FA).** CICYTTP-ZV-AFA-164 *Accipiter bicolor;* CICYTTP-ZV-AFA-100 Accipitridae indet.; CICYTTP-ZV-AFA-101 *Falco sparverius;* CICYTTP-ZV-AFA-168 *Falco sparverius*?; CICYTTP-ZV-AFA-203 *Falco sparvierus;* CICYTTP-ZV-AFA-169 *Falco* sp.; CICYTTP-ZV-AFA-103 *Polyborusplancus;* CICYTTP-ZV-AFA-104 *Polyborus plancus;* CICYTTP-ZV-AFA-173 *Polyborus plancus;* CICYTTP-ZV-AFA-178 *Polyborus plancus.*

**Sphenisciformes (SP).** CICYTTP-ZV-ASP-107 *Eudyptes* sp.; CICYTTP-ZV-ASP-106*Pygoscelis adeliae;* CICYTTP-ZV-ASP-105 *Pygoscelis papua;* CICYTTP-ZV-ASP-121 Spheniscidae indet.

**Suliformes (SU).** CICYTTP-ZV-ASU-108 *Phalacrocorax olivaceus;* CICYTTP-ZV-ASU-124 Phalacrocoracidae indet.

**Tinamiformes (TI).** CICYTTP-ZV-ATI-114 *Nothura maculosa;* CICYTTP-ZV-ATI-185 *Nothura maculosa*.

**Apodiformes (AP).** CICYTTP-ZV-AAP-133 *Chlorostilbon aureoventris;* CICYTTP-ZV-AAP-155 Trochilidae indet.; CICYTTP-ZV-AAP-198 *Chlorostilbon aureoventris*.

**Cuculiformes (CU).** CICYTTP-ZV-ACU-153 *Coccyzus melacoryphus;* CICYTTP-ZVACU-189 *Guira guira;* CICYTTP-ZV-ACU-197*Guira guira.*

**Coraciformes (CR).** CICYTTP-ZV-ACR-175 *Megaceryle torquata.*

**Caprimulgiformes (CA).** CICYTTP-ZV-ACA-183 *Hydropsalis brasiliana;* CICYTTP-ZV-ACA-184 *Hydropsalis brasiliana*

**Struthioniformes (SR).** CICYTTP-ZV-ASR-205 *Rhea americana;* CICYTTP-ZV-ASR-206 *Rhea americana.*

**Mammals**

**Rodentia. Cricetidae.** MACN-Ma23788 *Calomys laucha;* MACN-Ma 23786 *Calomys laucha;* MACN-Ma 23791 *Calomys laucha;* MACN-Ma 23787 *Calomys laucha;* MACN-Ma 23790 *Calomys laucha;* MACN-Ma 23789 *Calomys laucha;* MACN-Ma 19021 *Calomys laucha;* MACN-Ma 13790 *Calomys laucha;* MACN-Ma 19022 *Calomys laucha;* MACN-Ma 14027 *Calomys laucha;* MACN-Ma 18794 *Calomys laucha;* MACN-Ma 20831 *Calomys laucha;* MACN-Ma 18186 *Calomys laucha;* MACN-Ma 18791 *Calomys laucha;* MACN-Ma 20832 *Calomys laucha;* MACN-Ma 26948 *Calomys laucha;* MACN-Ma26944 *Calomys laucha;* MACN-Ma26945 *Calomys laucha;* MACN-Ma26942 *Calomys laucha;* MACN-Ma15738 *Calomys laucha;* MACN-Ma19020 *Calomys laucha;* MACN-Ma18792 *Calomys laucha;* MACN-Ma14621 *Calomys laucha;* MACN-Ma26949 *Calomys laucha;* MACN-Ma15745 *Calomys laucha;* MACN-Ma13383 *Calomys laucha;* MACN-Ma18798 *Calomys laucha;* MACN-Ma13794 *Calomys laucha;* MACN-Ma15746 *Calomys laucha;* MACN-Ma13917 *Calomys laucha;* MACN-Ma13391*Calomys laucha;* MACN-Ma5033 *Calomys laucha*; MACN-Ma15608 *Calomys laucha;* MACN-Ma26,52 *Calomys laucha;* MACN-Ma18797 *Calomys laucha;* MACN-Ma18600 *Calomys laucha;* MACN-Ma16559 *Calomys laucha;* MACN-Ma15715 *Calomys musculinus;* MACN-Ma13392 *Calomys musculinus;* MACN-Ma14639 *Calomys musculinus;* MACN-Ma13223 *Calomys musculinus;* MACN-Ma14628 *Calomys musculinus;* MACN-Ma18185 *Calomys musculinus;* MACN-Ma14617 *Calomys musculinus;* MACN-Ma14618 *Calomys musculinus;* MACN-Ma13126 *Calomys musculinus;* MACN-Ma13224 *Calomys musculinus;* MACN-Ma18188 *Calomysmusculinus;* MACN-Ma15610 *Calomys musculinus;* MACN-Ma14622 *Calomysmusculinus;* MACN-Ma18187 *Calomys musculinus;* MACN-Ma13261 *Calomysmusculinus;* MACN-Ma14683 *Calomys musculinus;* MACN-Ma14629 *Calomys musculinus;* MACN-Ma14426 *Calomys musculinus;* MACN-Ma14627 *Calomys musculinus;* MACN-Ma14425 *Calomys musculinus;* MACN-Ma16560 *Calomys musculinus;* MACN-Ma19195 *Calomys musculinus;* MACN-Ma20751 *Bolomys temchuki*; MACN-Ma20759 *Bolomys temchuki*; MACN-Ma20753 *Bolomys temchuki*; MACN-Ma20758 *Bolomys temchuki*; MACN-Ma20754 *Bolomys temchuki*; MACN-Ma20757 *Bolomys temchuki*; MACN-Ma20751 *Bolomys temchuki*; MACN-Ma20756 *Bolomys temchuki*; MACN-Ma20749 *Bolomys temchuki*; MACN-Ma20748 *Bolomys temchuki*; MACN-Ma28245 *Necromys lasiurus*; MACN-Ma25041 *Necromys* sp.; MACN-Ma20755 B*olomys temchuki*; MACN-Ma20747 *Bolomys temchuki*; MACN-Ma20750 *Bolomys temchuki*; MACN-Ma25043 *Necromys* sp.; MACN-Ma20746 *Bolomys temchuki*.*.*

**Caviidae.** MACN-Ma23674 *Cavia* sp.; MACN-Ma22583 *Cavia aparea;* MACN-Ma22587 *Cavia aparea;* MACN-Ma 27.7 *Cavia* sp.; MACN-Ma22592 *Cavia aparea;* MACN-Ma22600 *Cavia aparea;* MACN-Ma22603 *Cavia aparea;* MACN-Ma22295 *Cavia aparea;* MACN-Ma22593 *Cavia aparea;* MACN-Ma40.54*Microcavia australis;* MACN-Ma28.134 *Microcavia australis;* MACN-Ma34.7 *Microcavia australis;* MACN-Ma36.36 *Microcavia* sp.

**Ctenomyidae.** MACN-Ma48.238 *Ctenomys* sp.; MACN-Ma23618 *Ctenomys* sp.; MACN-Ma23279 *Ctenomys argentines;* MACN-Ma23617 *Ctenomys* sp.; MACN-Ma23277 *Ctenomys dorbignyi;* MACN-Ma23272 *Ctenomys* sp.; MACN-Ma25894 *Ctenomys* sp.; MACN-Ma29189 *Ctenomys* sp.; MACN-Ma19874 *Ctenomys* sp.; MACN-Ma 27276 *Galea comes;* MACN-Ma 27274 *Galea comes;* MACN-Ma 36.425 *Gale amusteloides;* MACN-Ma22838 *Galea musteloides.*

**Cingulata. Dasypodidae.** MFA O.845, MFA O.853, MFA O.857, MFA O.866, MFA 1062, MFA O.1071, *Dasypus hybridus.*