**Table S1**: List of bird species and studies we used in this review (the order of this list is based on the American Ornithological Society/South American Classification Committee). We included information about conservation status, samples analysed, laboratory methodologies, suspected lead source, concentration found, presence of individual upper threshold levels and bibliographic reference for each species.

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| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
| **Tinamiformes** | *Nothoprocta ornata* | Ornate tinamou | Least concern | Feathers, liver and kidney Inductively Coupled Plasma Mass Spectrometry | Mining | **Non Polluted sites 1****Liver:** 0.10 ± 0.17 mg/kg dm (0.0065-0.61) n=13**Kidney:** 0.48 ± 0.62 mg/kg dm (0.08–2.45) n=13**Feathers:** 1.33 ± 2.1 mg/kg dm (0.17–7.81) n=13**Polluted sites****Liver:** 0.75 ± 1.19 mg/kg dm (0.19–4.09) n=10**Kidney**: 1.75 ± 0.65 mg/kg dm (0.82–2.58) n=10**Feathers:** 7.76 ± 8.94 mg/kg dm (1.70–25.2) n=10 | Yes | Garitano-Zavala et al., 2010**Bolivia** |
|  | *Nothura darwinii* | Darwin's nothura | Least concern | Feathers, liver, kidneyInductively Coupled Plasma Mass Spectrometry  | Mining | **Liver:** 0.29 ± 0.23 mg/kg dm (0.06–0.72) n=6 **Kidney**: 10.71 ± 19.66 mg/kg dm (1.03–50.64) n=6**Feathers:** 16.52 ± 24.96 mg/kg dm (3.13–67.26) n=6 | Yes | Garitano-Zavala et al., 2010**Bolivia** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
| **Anseriformes** | *Dendrocygna bicolor* | Fulvous whistling-duck | Least concern | Bone Atomic absorption with Electrothermic Atomization | Lead ammunition | **Bone:** Some individuals show values upper> 20 mg/Kg dm n=14 | Yes | Ferreyra et al., 2009**Argentina** |
|  | *Dendrocygna bicolor* | Fulvous whistling-duck | Least concern | Liver, bone and bloodInductively Coupled Plasma-Atomic Emission Spectrometry | Lead ammunition | **Inland wetlands 2011****Liver:** 17.10 ± 5.33 mg/Kg dm (0.6–196) n=9**Bone:** 42.40 ± 4.86 mg/Kg dm (1–224) n=9**Island wetlands 2011****Liver:** 0.26 ± 3.63 mg/Kg dm (BDL -116.50) n=92**Bone:** 4.32 ± 0.90 mg/Kg dm (0.33–388) n=77**Island wetlands 2012****Liver:** 0.98 ± 3.31 mg/Kg dm (0.42–2.29) n=2**Bone:** 5.8 ± 1.3 mg/Kg dm (4.8–7) n=2**Blood:** 0.31 mg/Kg wm n=1 | Yes | Ferreyra et al., 2014**Argentina** |
|  | *Dendrocygna bicolor* | Fulvous whistling-duck | Least concern | Liver, bone and bloodInductively Coupled Plasma-Atomic Emission Spectrometry | Lead ammunition | **Liver:** 0.39 ± 5.87 mg/Kg dm (BDL-136)**Bone:** 5.49 ± 5.52 mg/Kg dm (0.33–388.5) n=33-103**Blood**: 0.31 mg/Kg wm 0.31 n=1 | Yes | Ferreyra et al., 2015**Argentina** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Dendrocygna viduata* | Black-bellied whistling-duck | Least concern | Liver, bone and bloodInductively Coupled Plasma-Atomic Emission Spectrometry | Lead ammunition | **Inland wetlands 2011****Liver:** 2.5 ± 5.87 mg/Kg dm (0.91–35.10) n=4**Bone:** 3.65 ± 4.72 mg/Kg dm (0.45–17.90) n=9**Island wetlands 2011****Liver:** 0.25 ± 2.72 mg/Kg dm (BDL -25.10) n=80**Bone:** 3.1 ± 3.69 mg/Kg dm (0.36–89.70) n=71**Inland wetlands 2012****Liver:** 0.31 ± 3.98 mg/Kg dm (BDL-11.80) n=34**Bone:** 3.30 ± 2.50 mg/Kg dm (0.90–43.20) n=34**Island wetlands 2012****Liver:** 0.24 ± 2.17 mg/Kg dm (BDL-1.40) n=16**Bone:** 5.45 ± 3.52 mg/Kg dm (1.10–38.60) n=16 **Blood:** (2011) 0.26 ± 2.77 mg/Kg wm (BDL-2.66) n=12**Blood:** (2012) 0.21 ± 2.70 mg/Kg wm (BDL-5.75) n=53 | Yes | Ferreyra et al., 2014**Argentina** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Dendrocygna viduata* | Black-bellied whistling-duck | Least concern | Liver, bone and bloodInductively Coupled Plasma-Atomic Emission Spectrometry | Lead ammunition | **Liver**: 0.29 ± 3.22 mg/Kg dm (BDL-35.10)**Bone:** 3.40 ± 3.37 mg/Kg dm (0.36–89.7) n= 76-134**Blood**: 0.21 ± 2.59 mg/Kg wm (BDL–5.75) n=45 | Yes | Ferreyra et al., 2015**Argentina** |
|  | *Dendrocygna autumnalis* | Black-bellied whistling-duck | Least concern | Liver, bone and bloodInductively Coupled Plasma-Atomic Emission Spectrometry | Lead ammunition | **Inland wetlands****Liver:** 0.21 ± 2.10 mg/Kg dm (BDL-0.79) n=14**Bone:** 3.68 ± 3.07 mg/Kg dm (1.30–34.40) n=14**Island wetlands****Liver:** 0.16 ± 2.42 mg/Kg dm (BDL-0.59) n=4**Bone:** 4.83 ± 3.62 mg/Kg dm (1.10–11.50) n=3**Blood:** 0.19 ± 2.66 mg/Kg wm (BDL-4.71) n=4 | Yes | Ferreyra et al., 2014 **Argentina** |
|  | *Dendrocygna autumnalis* | Black-bellied whistling-duck | Least concern | Liver, bone and bloodInductively Coupled Plasma-Atomic Emission Spectrometry | Lead ammunition | **Liver:** 0.2 ± 2.14 mg/Kg dm (BDL-0.79)n=17-18**Bone:** 3.86 ± 3.05 mg/Kg dm (1.10–34.40) n=17-18**Blood:** 0.19 ± 2.66 mg/Kg dm (BDL–4.71) n=13-17 | Yes | Ferreyra et al., 2015**Argentina** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Cygnus melancoryphus* | Black-necked swan | Least concern | Liver, kidney and muscleAtomic Absorption Spectrophotometer | Pollution-Mining | **Liver**: 1.5 mg/Kg wm n=1**Kidney:** 1.80 mg/Kg wm n=1**Muscle:** mg/Kg wm0.10 n=1 | No | Gil et al., 2006**Argentina** |
|  | *Amazonetta brasiliensis* | Brazilian teal | Least concern | Liver, bone, and bloodInductively Coupled Plasma-Atomic Emission Spectrometry | Lead ammunition | **Liver:** 0.28 ± 2.75 mg/Kg dm (BDL-16.90) n=57 **Bone:** 2.35 ± 2.55 mg/Kg dm (0.30–389) n=57**Blood**: BDL n=6 | Yes | Ferreyra et al., 2014 **Argentina** |
|  | *Amazonetta brasiliensis* | Brazilian teal | Least concern | Liver, bone, and bloodInductively Coupled Plasma-Atomic Emission Spectrometry | Lead ammunition | **Liver:** 0.28 ± 2.75 mg/Kg dm (BDL-16.90) n=57 **Bone:** 2.35 ± 2.55 mg/Kg dm (0.30–389) n=57**Blood**: BDL n=6 | Yes | Ferreyra et al., 2015 **Argentina** |
|  | *Netta peposaca* | Rosy-billed pochard | Least concern | BoneAtomic Absorption with Electrothermic Atomization | Lead ammunition | **Bone**: Some individuals show values upper> 20 mg/Kg dm n=16 | Yes | Ferreyra et al., 2009**Argentina** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Netta peposaca* | Rosy-billed pochard | Least concern | Liver, bone and bloodInductively Coupled Plasma-Atomic Emission Spectrometry | Lead ammunition | **Inland wetlands 2011****Liver:** 2.20 ± 6.67 mg/Kg dm (0.24–38.50) n=7**Bone:** 4.30 ± 6.70 mg/Kg dm (0.48–46.20) n=7**Island wetlands 2011****Liver:** 0.30 ± 3.66 mg/Kg dm (BDL-7.65) n=80**Bone:** 3.15 ± 4.25 mg/Kg dm (0.30–143) n=75**Island wetlands 2012****Liver:** 0.23 ± 2.26 mg/Kg dm (BDL-1.04) n=13**Bone:** 4.60 ± 4.42 mg/Kg dm (0.60–56.80) n=13**Blood:** BDL n=4 | Yes | Ferreyra et al., 2014**Argentina** |
|  | *Netta peposaca* | Rosy-billed pochard | Least concern | Blood, bone and liverInductively Coupled Plasma-Atomic Emission Spectrometry | Lead ammunition | **Liver**: 0.33 ± 4.00 mg/Kg dm (BDL-38.5) n= 42-100**Bone:** 3.39 ± 4.38 mg/Kg dm (0.30–143.2) n=42-100**Blood:** BDL n=4 | Yes | Ferreyra et al., 2015**Argentina** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
| **Podicipediformes** | *Podicephorus major* | Great grebe | Least concern | Muscle, bone, liver, gonads and brainGraphite Furnace Atomic Absorption Spectrometry | Human activities. motor boat and fisher sinkers  | **Muscle:** 3.88 ± 2.95 mg/kg dm (0.93-6.83) n=2**Liver:** 2.13 ± 0.59 mg/kg dm (1.54-2.72) n=2**Bone:** 0.85 ± 0.60 mg/kg dm (0.26-1.45) n=2**Gonad**: 5.81 ± 2.23 mg/kg dm (3.59-8.04) n=2**Brain:** 5.34 ± 1.84 mg/kg dm (3.50-7.18) n=2 | No | Cid et al., 2009**Argentina** |
|  | *Podicephorus major* | Great grebe | Least concern | Liver, kidney and muscleAtomic Absorption Spectrophotometer | Pollution, Mining | **Liver:** 2.60 mg/kg wm n=1**Kidney:** 2.40 mg/kg wm n=1 | No | Gil et al., 2006 **Argentina** |
|  | [*Podiceps occipitalis*](http://www.iucnredlist.org/details/62114375/0) | Southern silvery grebe | Least concern | Liver, kidney and muscleAtomic Absorption Spectrophotometer | Pollution Mining | **Liver:** 3.60 mg/kg wm n=1 **Kidney:** 2.20 mg/kg wm n=1 | No | Gil et al., 2006**Argentina**  |
| **Columbiformes** | *Columbina squammata* | Scaled dove | Least concern | Blood and feathersAtomic Absorption Spectrophotometer | Car emissions- Mining | **Blood:** 0.10 ± 0.13 mg/Kg dm (0.00-0.38) n=10**Feathers:** 5.89 ± 5.96 mg/Kg dm (1.00-16.50) n=10 | Yes | Alpino-Cabrera et al., 2016 **Venezuela** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
| **Apodiformes** | *Adelomyia melanogenys* | Speckled hummingbird | Least concern | FeathersAtomic Absorption SpectrophotometerX-Ray Energy Disperse Spectroscopy | Pollution | **Feathers:** 4.00 ± 0.36 mg/Kg dm n=2 | Yes | Góngora et al., 2016 **Colombia** |
|  | *Eriocnemis vestita* | Glowing puffleg | Least concern | FeathersAtomic Absorption Spectrophotometer X-Ray Energy Disperse Spectroscopy | Pollution | **Feathers:** 1.89 ± 0.04 mg/Kg dm n=4 | No | Góngora et al., 2016**Colombia** |
|  | *Eriocnemis cupreoventris* | Coppery-bellied puffleg | Near Threatened | FeathersAtomic Absorption SpectrophotometerX-Ray Energy Disperse Spectroscopy  | Pollution | **Feathers:** 2.01 ± 0.74 mg/Kg dm n=2 | No | Góngora et al., 2016**Colombia** |
|  | *Coeligena bonapartei* | Golden-bellied starfrontlet | Least concern | FeathersAtomic Absorption SpectrophotometerX-Ray Energy Disperse Spectroscopy  | Pollution | **Feathers:** 3.48 ± 0.41 mg/Kg dm n=2 | Yes | Góngora et al., 2016 **Colombia** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | Ocreatus underwoodii | Booted racket-tail | Least concern | FeathersAtomic Absorption SpectrophotometerX-Ray Energy Disperse Spectroscopy  | Pollution | **Feathers:** 4.80 ± 0.34 mg/Kg dm n=3 | Yes | Góngora et al., 2016**Colombia** |
| **Charadriiformes** | *Haematopus palliatus* | American oystercatchers | Least concern | Eggs shellAtomic Absorption Spectrophotometer | Pollution | **Egg shell:** 7.23 ± 8.02 mg/Kg dm  | ----- | Simonetti et al., 2015**Argentina** |
|  | *Calidris subruficollis* | Buff-breasted sandpiper | Near Threatened | FeathersGraphite Furnace and Flame Atomic Absorption Spectrophotometry | Pollution | **Feathers:** 2.18 ± 0.63 mg/kg dm n=29 | No | Scherer et al., 2015**Brazil** |
|  | *Leucophaeus pipixcan* | Franklin's gull | Least concern | FeathersInductively Coupled plasma mass Spectrometry | Pollution | **Feathers:** 2.57 ± 5.5 mg/kg dm n=25 | Yes | Sepúlveda and Gonzalez-Acuña, 2014**Chile** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Larus dominicanus* | Kelp gulls | Least concern | Liver and KidneyInductively Coupled Plasma Optical Spectrometry | Pollution | **Liver:** 37.80 ± 10.28 mg/kg wm (19.42-.54.11)n= 39**Kidney:** 33.94 ± 9.17 mg/kg wm (18.61-44.61) n= 39 | Yes | Ferreira, 2013**Brazil** |
|  | *Larus dominicanus* | Kelp gulls | Least concern | FeathersGraphite Furnace and Flame Atomic Absorption Spectrophotometry | Human emissions | **Feathers Juveniles:** 1.47 ± 0.385 mg/kg dm n=30**Feathers sub adults: 3**.708 ± 2.024 mg/kg dm n=30**Feathers adults:** 7.536 ± 1.66 mg/kg dm n=30 | Yes | Barbieri et al., 2010**Brazil** |
|  | *Larus dominicanus* | Kelp gulls | Least concern | Liver, Kidney and muscleAtomic Absorption Spectrophotometer | Pollution Mining | **Muscle:** 0.86 mg/kg dm n=6 | No | Gil et al., 2006**Argentina** |
|  | *Larus dominicanus*  | Kelp gulls | Least concern | FeathersInductively Coupled plasma mass Spectrometry | Pollution | **Feathers:** 5.97 ± 6.0 mg/kg dm n=22 | Yes | Sepúlveda and Gonzalez-Acuña, 2014**Chile** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
| **Sphenisciformes** | *Pygoscelis papua* | Gentoo penguin | Least concern | Liver, kidney and brainFlame Atomic Absorption Spectroscopy | Pollution | **Liver:** 2.78 ± 0.81 mg/Kg dm n=20**Kidney**: 2.09 ± 1.45 mg/Kg dm n=20**Brain:** 1.04 ± 0.87 mg/Kg dm n=20 | No | Keymer et al., 2001**Argentina** |
|  | *Spheniscus humboldti* | Humboldt penguin | Vulnerable | Faecal samplesGraphite Furnace Atomic Absorption Spectrophotometer  | Pollution | **Faeces:** Site 1: 1.80 ± 3.00 mg/kg dm n=20**Faeces:** Site 2: 1.59 ± 2.12 mg/kg dm n=19**Faeces:** Site 3: 12.79 ± 9.97 mg/kg dm n=24 | ------- | Celis et al., 2014**Chile** |
|  | *Spheniscus mendiculus* | Galapagos penguin | Endangered | FeathersAtomic Absorption Spectrophotometer | Pollution | **Feathers:** 193.0 ± 48.30 mg/kg dm n=29 Site 1**Feathers:** 71.3 ± 35.60 mg/kg dm n=29 Site 2**Feathers:** 55.5 ± 27.80 mg/kg dm n=29 Site 3  | Yes | Jiménez-Uzcátegui et al., 2017**Ecuador** |
|  | *Spheniscus magellanicus* | Magellanic penguin | Near Threatened | Liver, kidney and brainFlame Atomic Absorption Spectroscopy | Pollution | **Liver:** 2.78 ± 0.82 mg/kg dm n=12 **Kidney:** 1.31 ± 0.75 mg/kg dm n=12  **Brain:** 0.75 ± 0.35 mg/kg dm n=12 | No | Keymer et al., 2001**Argentina** |
|  | *Spheniscus magellanicus* | Magellanic penguin | Near Threatened | Liver, kidney and muscleAtomic Absorption Spectrophotometer | PollutionMining | **Liver:** BDL-5.55 mg/kg wm n=16**Kidney:** 0.45-2 mg/kg wm n=16**Muscle:** 0.36-1.63 mg/kg wm n=16 | No | Gil et al., 2006**Argentina** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Spheniscus magellanicus* | Magellanic penguin | Near Threatened | Liver and musclesGraphite Furnace Atomic Absorption Spectrometry | Pollution | BDL n=47  | No | Vega et al., 2010**Brazil** |
|  | *Spheniscus magellanicus* | Magellanic penguin | Near Threatened | Feathers, liver, KidneyGraphite Furnace Atomic Absorption Spectrometry | Pollution | **Liver:** 0.58 ± 0.32 mg/kg dm (0.20–1.33) n=22**Kidney:** 0.55 ± 0.30 mg/kg dm (0.19–1.16) n=22**Feathers:** 0.14 ± 0.08 mg/kg dm (0.05–0.32) n=22 | No | Kehrig et al., 2015**Brazil** |
|  | *Eudyptes chrysocome* | Southern rock hopper penguin | Vulnerable | Liver, kidney and brainFlame Atomic Absorption Spectroscopy | Pollution | **Liver:** 1.93 ± 1.24 mg/Kg dm n=67**Kidney**: 2.74 ± 2.34 mg/Kg dm n=67**Brain:** 0.81± 0.46 mg/Kg dm n=67 | No | Keymer et al., 2001**Argentina** |
| **Procellariiformes** | *Phoebastria irrorata* | Waved albatross | Critically endangered | FeathersAtomic Absorption Spectrophotometer | Pollution | BDL | No | Jiménez-Uzcátegui et al., 2017**Ecuador** |
|  | *Thalassarche melanophris* | Black-browed albatross | Near Threatened | Liver, kidney and muscleAtomic Absorption Spectrophotometer | Pollution, Mining | **Muscle:** 0.80 mg/Kg wm n=1 | No | Gil et al., 2006**Argentina** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Thalassarche melanophris* | Black-browed albatross | Near Threatened | FeathersAtomic Absorption Spectrophotometer | Pollution | **Males** n=27**Primary feather:** 5.71 ± 5.67 mg/Kg dm **Breast Feather:** 3.17 ± 3.34 mg/Kg dm **Females** n=17**Primary feather:** 7.61 ± 12.03 mg/Kg dm **Breast Feather:** 3.35 ± 2.55 mg/Kg dm  | Yes | Seco Pon et al., 2011**Argentina** |
|  | [*Procellaria aequinoctialis*](http://www.iucnredlist.org/details/22698140/0) | White-chinned petrel | Vulnerable | FeathersAtomic Absorption Spectrophotometer | Pollution | BDL | No | Seco Pon et al., 2012**Argentina** |
|  | [*Procellaria aequinoctialis*](http://www.iucnredlist.org/details/22698140/0) | White-chinned petrel | Vulnerable | Feathers and bloodAtomic Absorption Spectrophotometer | Pollution | **Blood:** 33.05 ± 8.48 mg/kg dm **Feathers:** 8.21 ± 3.53 mg/kg dm | Yes | Carvalho et al., 2013**Brazil** |
|  | *Procellaria conspicillata* | Spectacled Petrel | Vulnerable | Feathers and bloodAtomic Absorption Spectrophotometer | Pollution | **Blood:** 9.30 ± 4.33 mg/kg dm **Feathers:** 32.26 ± 8.71 mg/kg dm | Yes | Carvalho et al., 2013**Brazil** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Ardenna grisea* | Sooty shearwater | Near Threatened | Liver, kidney and muscleAtomic Absorption Spectrophotometer | PollutionMining | **Liver:** 0.70-3.50 mg/kg wm n=2**Kidney.** BDL**-** 2.4 mg/kg wm n=2**Muscle:** 0.90-1.10 mg/kg wm n=2 | No | Gil et al., 2006**Argentina** |
|  | *Ardenna gravis* | Great shearwater | Least concern | Liver and kidneyFlame Atomic Absorption Spectrometry | Pollution | **Liver:** Adult: 0.21 ± 0.22 mg/kg dm. Juvenile: 0.15 ± 0.12 mg/kg dm n=15 **Kidney:** Adult: 0.28 ± 0.20 mg/kg dm, Juvenile 0.07 ± 0.07 mg/kg dm n=15 | No | Barbieri et al., 2007**Brazil** |
| **Suliformes** | *Fregata magnificens* | Magnificent frigatebird | Least concern | Liver and KidneyInductively Coupled Plasma Atomic Emission Spectrometry | Pollution | **Liver:** 39.95 ± 8.02 mg/Kg wm (20.82- 59.13) n=43**Kidney:** 37.35 ± 8.55 mg/Kg wm (15.24- 55.67) n=43 | Yes |  Ferreira, 2011b**Brazil** |
|  | *Sula leucogaster* | Brown booby | Least concern | Liver and KidneyInductively Coupled Plasma optical Emission Spectrometry | Human activities | **Liver:** 41.15 ± 12.31 mg/kg wm n=39**Kidney:** 39.62 ± 12.60 mg/kg wm n=39  | Yes | Ferreira, 2010b**Brazil** |
|  | *Phalacrocorax gaimardi* | Red-legged cormorant | Near Threatened | Liver, kidney and muscleAtomic Absorption Spectrophotometer | Pollution, Mining | **Muscle:** 1.30 mg/kg wm n=1 | No | Gil et al., 2006**Argentina** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Phalacrocorax harrisi* | Flightless cormorant | Vulnerable | FeathersAtomic Absorption Spectrophotometer | Pollution | **Feathers:** 42.60 ± 8.52 mg/kg dm n=30 Site 1**Feathers:** 17.00 ± 8.51 mg/kg dm n=30 Site 2 | Yes | Jiménez-Uzcátegui et al., 2017**Ecuador** |
|  | *Phalacrocorax brasilianus* | Neotropic cormorant | Least concern | Muscle, bone, liver, gonads and brainGraphite Furnace atomic absorption spectrometry | Human activities, motor boat and fisher sinkers | **Muscle:** 2.17 ± 0.38 mg/kg dm (1.08-3.30) n=7**Bone:** 1.33 ± 0.34 mg/kg dm (0.46-2.34) n=7**Liver:** 1.88 ± 0.21 mg/kg dm (1.14-2.76) n=7**Gonad:** 9.68 ± 1.48 mg/kg dm (4.16-14.39) n=7**Brain:** 1.76 ± 0.17 mg/kg dm (0.95-2.29) n=7 | No | Cid et al., 2009**Argentina** |
|  | *Phalacrocorax atriceps* | Imperial shag | Least concern | Liver, kidney and muscleAtomic Absorption Spectrophotometer | Pollution, Mining | **Muscle:** 0.90 mg/kg wm n=1 | No | Gil et al., 2006**Argentina** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
| **Pelecaniformes** | *Pelecanus occidentalis* | Brown Pelican | Least concern | Liver, kidney, muscle, brain, heart and lungInductively Coupled Plasma Optical Emission Spectrometry | Pollution | **Liver:** 0.006 ± 0.01 mg/kg dm n=6**Kidney:** 0.044 ± 0.11 mg/kg dm n=6**Muscle:** 0.12 ± 0.29 mg/kg dm n=6**Brain:** 0.02 ± 0.06 mg/kg dm n=6**Heart: :** 0.16 ± 0.39 mg/kg dm n=6**Lung: :** 0.04 ± 0.1 mg/kg dm n=6 | No | Vera et al., 2016**Venezuela** |
|  | *Nycticorax nycticorax* | Black-crowned night-heron | Least concern | Liver and kidneyInductively Coupled Plasma Atomic Emission Spectrometry | Pollution | **Liver:** 42.15 ± 4.60 mg/kg wm n=N**A**  **Kidney:** 43.31 ± 5.99 mg/kg wm n= NA | Yes | Ferreira and Horta, 2010**Brazil** |
|  | [*Butorides striata*](http://www.iucnredlist.org/details/22728182/0) | Green-backed heron | Least concern | Liver, kidney, muscle, bone and feathers Atomic Absorption Spectrophotometer | Pollution | **Liver:** (BDL) n=8 **Kidney:** BDL (ND to 4.11) mg/Kg wm n=8**Muscle:** BDL n=8**Bone**: 15.44 ± 4.92 mg/Kg wm (7.21–20.81) n=8**Feathers**: (ND–11.76) mg/Kg wm n=8 | Yes | Simonetti et al., 2014 **Argentina** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Egretta thula* | Snowy egret | Least concern | Liver and kidneyInductively Coupled Plasma atomic Emission Spectrometry | Pollution | **Liver:** 51.24 mg/kg wm (39.3-68.33) n=42**Kidney:** 41.45 mg/kg wm (24.1-67.5) n=42 | Yes | Ferreira, 2011a **Brazil** |
|  | *Egretta caerulea* | Little blue heron | Least concern | Liver and kidneyInductively Coupled Plasma atomic Emission Spectrometry | Pollution | **Liver**: 41.15 ± 12.31 mg/kg wm (23.1-62.1) n=22**Kidney**: 39.62 ± 12.60 mg/kg wm (24.1-67.1) n=22 | Yes | Ferreira, 2010a**Brazil** |
| **Cathartiformes** | *Vultur gryphus* | Andean condor | Near Threatened | FeathersAtomic Absorption Spectrophotometer | Lead ammunition | **Feathers:** 1.17 mg/Kg dm (0.01-21.24) n=152 | Yes | Lambertucci et al., 2011**Argentina** |
|  | *Vultur gryphus* | Andean condor | Near Threatened | Blood and boneGraphite Furnace Atomic Absorption Spectrophotometry | Lead ammunition | **Blood**: 0.1547 ± 0.2112 mg/kg wm (0.002-1.04) n=76 **Bone:** 23.08 ± 31.39 mg/kg dm (1.30 – 148) n=47 | Yes | Wiemeyer et al., 2017**Argentina** |
|  | *Coragyps atratus* | Black vulture | Least concern | BloodAtomic Absorption Spectrophotometer | Petrochemical industries-landfills | **Blood:** 6.85 ± 4.85 mg/kg wm (0.3-15) n=10 | Yes | Bravo et al., 2005**Venezuela** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Cathartes aura* | Turkey vulture | Least concern | BoneMethodology not available | Lead ammunitions | **Bone:** 3.5 mg/Kg dm n=1 | No | Saggese et al., 2009**Argentina** |
|  | *Cathartes aura* | Turkey vulture | Least concern | Liver and kidneyAtomic Absorption Spectrophotometer | Mining | **Liver**: 0.86 mg/Kg dm (0.15-7.9) n=40**Kidney**: 1.05 mg/Kg dm (0.04-9.86) n=40 | Yes | Valladares et al., 2013**Chile** |
| **Accipitriformes** | *Harpagus bidentatus* | Double-toothed kite | Least concern | Blood Graphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** BDL n=1 | No |  Shrum, 2009  **Peru** |
|  | *Accipiter bicolor* | Bicolored Hawk | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** BDL\* n=2 | No |  Shrum, 2009**Peru** |
|  | *Buteogallus schistaceus* | Slate-colored hawk | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** 0.081 mg/Kg wm (BDL - 0.411) n=11 | No | Shrum, 2009**Peru** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Buteogallus lacernulatus* | White-necked hawk | Vulnerable | Liver and kidneyInductively Coupled Plasma-Optical Emission Spectrometry | Pollution | **Liver:** 41.94 mg/kg wm (37.72-46.43) n=NA**Kidney**: 42.94 mg/kg wm (34.3-50.3) n=NA | Yes | Ferreira, 2009**Brazil** |
|  | *Urubitinga urubitinga* | Great black hawk | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** BDL n= 1 | No | Shrum, 2009  **Peru** |
|  | *Buteogallus coronatus* | Crowd eagle | Endangered | BloodMethodology not available | Lead ammunitions | **Blood:** 0.027 mg/kg wm n=1  | No | Saggese et al., 2009**Argentina** |
|  | *Rupornis magnirostris* | Roadside Hawk | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** 0.105 mg/Kg wm ( (BDL - 1.272) n=35 | Yes | Shrum, 2009**Peru**  |
|  | *Leucopternis melanops* | Black-faced hawk | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** 0.056 mg/Kg wm n=1 | No | Shrum, 2009**Peru** |
|  | *Leucopternis kuhli* | White-browed hawk | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** BDL n=2 | No | Shrum, 2009**Peru** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Buteo platypterus* | Broad-winged hawk | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** BDL n= 1 | No |  Shrum, 2009**Peru** |
| **Falconiformes** | *Micrastur ruficollis* | Barred forest-falcon | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** 0.080 mg/kg wm (BDL - 0.605) n=9 | Yes |  Shrum, 2009**Peru** |
|  | *Micrastur gilvicollis* | Lined forest-falcon | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** 0.14 mg/kg wm (BDL - 0.494) n=12 | Yes |  Shrum, 2009**Peru** |
|  | *Micrastur mirandollei* | Slaty-backed forest-falcon | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** BDL n=2 | No |  Shrum, 2009**Peru** |
|  | *Micrastur semitorquatus* | Collared forest-falcon | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** BDL n=4 | No | Shrum, 2009**Peru** |
|  | *Micrastur buckleyi* | Buckley's forest-falcon | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood:** BDL n=2 | No | Shrum, 2009**Peru** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Caracara plancus* | Southern Caracara | Least concern | Feather and LiverInductively Coupled Plasma Optical Spectrometry | Pollution | **Feather (dead):** 5.74 ± 0.78 mg/kg dm n=21 **Feather (Live):** 5.27 ± 1.22 mg/kg dm n=21  **Liver:**1.36 ± 0.11 mg/kg dm n=21 | Yes | Da Silva et al., 2017**Brazil** |
|  | *Daptrius ater* | Black caracara | Least concern | BloodGraphite Furnace Atomic Absorption Spectrophotometer | Lead ammunition | **Blood**: BDL n=1 | No | Shrum, 2009**Peru** |
| **Passeriformes** | *Pitangus sulphuratus* | Great kiskadee | Least concern | Muscle, bone, liver, gonads and brainGraphite Furnace Atomic Absorption Spectrometry | Human activities. motor boat and fisher sinkers | **Muscle:** 3.81 ± 0.81 mg/kg dm (1.39-6.19) n=6**Bone:** 3.60 ±0.63 mg/kg dm (2.07-5.86) n=6**Liver:** 4.78 ±0.92 mg/kg dm (2.94-9.21) n=6**Gonad**: 8.05 ± 0.72 mg/kg dm (4.85-9.86) n=6 **Brain:** 11.15 ± 5.04 mg/kg dm (2.44-33.36) n=6 | Yes | Cid et al., 2009**Argentina** |
|  | [*Cyclarhis gujanensis*](http://www.iucnredlist.org/details/22705124/0) | Rufous-browed peppershrike | Least concern | Liver, Kidney, hearth and intestineAtomic Absorption Spectrophotometer | Batteries | **Pool:** 7.48 mg/Kg dm n=1 | Yes | Martins et al., 2010**Brazil** |
| **Order** | **Scientific name** | **Common name** | **Conservation status IUCN** | **Sampled type and methodology** | **Presumed Source of lead** | **Concentration Mean ± SD and Range** **mg/kg dry mass (dm) or mg/kg wet mass (wm)** | **Individuals upper threshold levels \*\*** | **Article and country** |
|  | *Turdus fuscater* | Great thrush | Least concern | Liver, kidney , spleen, lung and brainGraphite Furnace Atomic Absorption Spectrometry | Pollution | **Liver:** 0.29 ± 0.04 mg/kg wm n=3**Kidney:** 0.21 ± 0.09 mg/kg wm n=3**Spleen:** 0.17 ± 0.09 mg/kg wm n=3**Lung:** 0.24 ± 0.09 mg/kg wm n=3**Brain:** 0.18 ± 0.09 mg/kg wm n=3 | No | Cubillos et al., 2017**Colombia** |
|  | [*Conirostrum speciosum*](http://www.iucnredlist.org/details/22722083/0) | Chestnut-vented conebill | Least concern | Liver, Kidney, hearth and intestineAtomic Absorption Spectrophotometer | Batteries | **Pool:** 7.38 mg/Kg dm n=1 | Yes | Martins et al., 2010**Brazil** |
|  | [*Dacnis cayana*](http://www.iucnredlist.org/details/22722991/0) | Blue dacnis | Least concern | Liver, Kidney, hearth and intestineAtomic Absorption Spectrophotometer | Batteries | **Pool**: mg/Kg dm 6.79-7.98 n=3 | Yes |  |
|  | [*Tangara sayaca*](http://www.iucnredlist.org/details/22722534/0) | Sayaca tanager | Least concern | Liver, Kidney, hearth and intestineAtomic Absorption Spectrophotometer | Batteries | **Pool:** 11.55-12.74 mg/Kg dm n=2 | Yes | Martins et al., 2010**Brazil** |

\* Below detectable levels

\*\* according Table S2 or the conclusions of the article cited

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