**Table S3.** Summary of studies measuring stable isotopes in wild and captive animals organized by taxon group (fish, amphibian, reptile, bird, and mammal). In the “Summary proposal,” DTDF means diet-tissue discrimination factors. In “Summary results,” the equal sign (=) indicates the absence of significant differences in inferential tests.

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **TAXON (SPECIE)** | **ISOTOPES ANALYZED** | **TISSUE** | **LOCAL (COUNTRY)** | **SUMMARY PROPOSAL:** | **SUMMARY RESULT** | **REFERENCE** |
| **FISH** | *Thunnus thynnus* | *δ*13C, *δ*15N | Muscle and liver | Italy | To assess the changes occurring during farming, investigate the sources of nutrition for *T. thynmus*. | *δ*13Cwild = *δ*13Ccaptive  *δ*15Nwild < *δ*15Ncaptive | (Vizzini, Tramati & Mazzola, 2010)\* |
| *Salmo trutta;* | *δ*13C, *δ*34S | Scale | Poland | To analyze the relationship between sulfur in sulfate dissolved in water and in fish scales | *δ*13Cwild-river < *δ*13Ccaptive;  *δ*34Swild-river < *δ*34Scaptive | (Trembaczowski & Niezgoda, 2011) |
| *Belone belone; Boops boops* | *δ*13C, *δ*15N | Muscle | Croatia | To assess the presence, concentrations, origin, and fate of targeted metals and the effects farming has on wild fish. | *δ*13Cwild = *δ*13Ccaptive  *B. belone: δ*15Nwild = *δ*15Ncaptive  *B. boops: δ*15Nwild < *δ*15Ncaptive | (Fernandez-Jover et al., 2020)\* |
| **REPTILE** | *Sphenodon punctatus* | *δ*13C | Blood (RBC) | New Zeland | To make inferences about marine content in the diet of *S. punctatus* in response to seasonality and life story. | *δ*13Cwild = *δ*13Ccaptive | (Cree et al., 1999) |
| *Alligator mississippiensis* | *δ*18O | Bone | USA | To analyze the inter and intra-bone variability of *δ*18O according to temperature regularity. | *δ*18Owild < *δ*18Ocaptive | (Stoskopf, Barrick & Showers, 2001) |
| *Bothrops atrox* | *δ*13C, *δ*15N | Blood and scale | Brazil | To analyze the influence of different landscapes on the diet of *B. atrox* | Blood:  *δ*13Cwild = *δ*13Ccaptive  *δ*15Nwild = *δ*15Ncaptive  Scale:  *δ*13Cwild\_forest < *δ*13Ccaptive  *δ*15Nwild\_forest > *δ*15Ncaptive | (Martinez, 2016) |
| **BIRD** | *Cerorhinca monocerata* | *δ*13C, *δ*15N | Blood and feather | USA | To examine the effects of growth and nutritional status on stable isotope signatures in *C. monocerata* tissues. | *δ*13Cwild < *δ*13Ccaptive;  *δ*15Nwild < *δ*15Ncaptive | (Sears, Hatch & O’Brien, 2009)\* |
| *Fratercula arctica; Uria aalge* | *δ*13C, *δ*15N | Blood (RBC and plasma) | Canada | To estimate the DTDFs for captive *F. artica* and *U. aalge* and to reconstruct the diet of wild breeding individuals of the same species | *δ*13Cwild < *δ*13Ccaptive;  *δ*15Nwild < *δ*15Ncaptive  (RBC and plasma, both species) | (Jenkins et al., 2020) |
| **MAMMAL** | *Mustela vison* | *δ*13C | Claw and teeth | Denmark | To conduct a diet-change experiment to verify if the SIA could identify farm-scaped minks (*M. vison*). | *δ*13Cwild = *δ*13Ccaptive  (Claw and teeth) | (Hammershøj, Asferg & Kristensen, 2004) |
| *Hydrochoerus hydrochaeris* | *δ*13C, *δ*15N | Blood, claw, hair, and muscle | Brazil | To analyze the diet composition of *H. hydrochaeris* and the reliability of using stable isotopes as a proxy | Blood, claw, and hair:  *δ*13Cwild = *δ*13Ccaptive  *δ*15Nwild < *δ*15Ncaptive  Muscle:  *δ*13Cwild > *δ*13Ccaptive  *δ*15Nwild = *δ*15Ncaptive | (Navarro, 2009) |
| *Phoca vitulina* | *δ*13C, *δ*15N | Blood (serum) | USA | To determine the trophic level and DTDFs of different tissues and groups of harbor seals | *δ*13Cwild > *δ*13Ccaptive;  *δ*15Nwild > *δ*15Ncaptive | (Germain et al., 2012) |
| *Loxodonta africana* | *δ*13C, *δ*15N | Hair | South Africa | To compare the patterns of seasonal dietary variability across individuals of *L. Africana.* | *δ*13Cwild < *δ*13Ccaptive;  *δ*15Nwild > *δ*15Ncaptive | (Codron et al., 2013) |
| *Otaria flavescens* | *δ*13C, *δ*15N | Blood (RBC and serum) | Uruguay; Spain | To estimate DTDF for females and pups *O. flavescens* in the wild and captive. | *δ*13Cwild > *δ*13Ccaptive;  *δ*15Nwild > *δ*15Ncaptive | (Drago et al., 2015)\* |
| *Otaria flavescens* | *δ*13C, *δ*15N | Vibrissae | Argentina; Spain | To analyze the fluctuation in stable isotope values along the vibrissae from wild adult breeding *O. flavescens* | *δ*13Cwild > *δ*13Ccaptive;  *δ*15Nwild > *δ*15Ncaptive | (Cardona et al., 2017) |

\*We could not access or infer the original database. The inferences were based on the mean and standard deviation.