

Dietary and isotopic specialization: The isotopic niche of three cinclodes ovenbirds

Martínez Del Rio, Carlos

Sabat, Pablo

Anderson-Sprecher, Richard

Gonzalez, Sandra P.

By comparing the isotopic composition of tissues deposited at different times, we can identify individuals that shift diets over time and individuals with constant diets. We define an individual as an isotopic specialist if tissues deposited at different times have similar isotopic composition. If tissues deposited at different times differ in isotopic composition we define an individual as an isotopic generalist. Individuals can be dietary generalists but isotopic specialists if they feed on the same resource mixture at all times. We assessed the degree of isotopic and dietary specialization in three related Chilean bird species that occupy coastal and/or freshwater environments: *Cinclodes oustaleti*, *Cinclodes patagonicus*, and *Cinclodes nigrofumosus*. *C. oustaleti* individuals were both isotopic and dietary generalists. Tissues deposited in winter (liver and muscle) had distinct stable C ($\delta^{13}\text{C}$) and stable N isotope ratio ($\delta^{15}\text{N}$) values from tissues deposited in the summer (wing feathers)