## **Supplementary Table 3**

Type of 2D map (partial or complete) for each the 6 otolith samples shown in Supplementary Figure 1 and the sex, total length, and estimated age of each white hake (*Urophycis tenuis*) from which the ototiths were collected. Estimates from aging by the primary reader of annuli and from analysis of peaks in concentrations of an isotope of manganese (Mn)—<sup>55</sup>Mn—in otoliths were compared for this study. The sample letter corresponds to the letter of the panel in Supplementary Figure 1 in which the 2D maps for that otolith are shown. Fish were sampled in Maine and New Hampshire from 2007 through 2021.

			Total length	Age (years)	
Sample	2D Map Type	Sex	(cm)	Primary	<sup>55</sup> Mn
A	Complete	Female	102	10	10
В	Complete	Male	53	4	4
C	Complete	Female	69	7	6
D	Partial	Female	48	4	4
E	Partial	Female	74	7	6
F	Partial	Female	56	5	3