

healthy participants. The findings suggest that macrophages play a role in the progression of glaucoma, possibly migrating to active areas of disease during early stages. According to the authors, the findings provide a label-free technique to examine retinal macrophages in live human eyes and point to potential biomarkers that could facilitate the development of treatments for glaucoma and other age-related ocular and neurological diseases. — J.W.

Parent–offspring conflict in songbird fledging

Young birds that prolong their stay in the nest increase their chances of survival. However, continuing care may impose an overall cost on parents by decreasing the fitness of the entire brood. The influence of this kind of parent–offspring conflict on the age at which songbirds fledge, or leave the nest, is unclear. Todd Jones et al. (pp. 30539–30546) analyzed data from eight studies of 18 songbird species across the United States. Twelve of the species showed evidence of postfledging bottlenecks; in these species, the mortality rates of fledglings were higher than those of nestlings. Postfledging bottlenecks led to a 14% increase in the probability that at least one offspring in the brood would survive until independence. Moreover, parental benefits associated with early fledging could explain variation in fledging age across species. Taken together, the findings suggest that songbird parents enhance their own fitness by manipulating offspring into fledging early—at the cost of the fledglings' survival.

According to the authors, parent–offspring conflict may similarly affect the age of offspring during key transitions in life for other animals that provide parental care. — J.W.

Environmental impacts of seafood mislabeling

Reports of seafood mislabeling have increased over the past decade, but evidence of its environmental impacts has been limited and largely anecdotal. Kailin Kroetz et al. (pp. 30318–30323) analyzed trade, production, and mislabeling data to systematically characterize various effects of seafood mislabeling in the United States. An estimated 190,000–250,000 tons of mislabeled seafood products are sold in the United States each year, representing approximately 3.4–4.3% of consumed seafood. Compared with the expected products listed on the label, the corresponding substitute products were 28% more likely to be imported from other countries, which may have weaker environmental laws than the United States. Approximately 58% of mislabeled seafood consumed were exclusively wild-caught products, whereas the remaining 42% were potentially farmed. Compared with the expected products listed on the label, the corresponding substitute products scored worse on measures of fishery management effectiveness and marine population health, which covered factors such as abundance, bycatch, and discards. According to the authors, holistic and collaborative approaches are needed to reduce seafood mislabeling and its wide-ranging negative impacts. — J.W.