Feather-Damaging Behavior in Companion Parrots: Are Species Differences Intrinsic or Caused by Variations in Husbandry?

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Feather-damaging behavior (FDB; in which birds chew or pluck their own feathers) is unknown in free-living parrots but common in companion parrots in captivity. Susceptibility to FDB is suggested—but not empirically demonstrated—to vary across species, and its cause(s) remains unconfirmed. To address these issues, we analyzed data from an extensive online companion nonhuman animal caregiver survey. Among 658 companion parrots representing 23 species (n ≥ 8 individuals/species), the percentage of individuals exhibiting FDB varied significantly across species ($G_{22}^2 = 55.95, p < .0001$), and these differences were unrelated to species differences in population mean ages, sex ratios, and several aspects of husbandry ($p > .20$). The FDB tended to be less prevalent in species provided with diets that often included fresh fruits/vegetables ($F_{1,22}^1 = 3.31, p = .08$); however, this relationship appeared correlational because, within species, individuals who were regularly provided with fresh foods were no less likely to exhibit FDB than conspecifics who were not ($T_{22}^2 = -0.45, p = .66$). To determine whether the percentage of individuals regularly receiving fresh foods (“fresh diet”) reflected an underlying aspect of species-typical feeding biology that both attracts certain feeding regimes in captivity and is a risk factor for FDB, we classified the species into 2 groups (according to whether they naturally consume relatively more fruit pulp than seeds) and tested whether this classification related to the captive diet measure, fresh diet. There was no relationship ($T_{22}^2 = 0.79, p = .44$), which implies that any underlying FDB risk factor either involves a different aspect of natural feeding biology (perhaps one that is actually prevented in captivity) or correlates with some other feature of husbandry.