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Brazil's new laws bug collectors

TROPICAL FORESTS HARBOR diverse and largely unknown insect communities, many of which are threatened species (1). Habitat loss has been shown to be the primary threat to insect populations, including all threatened insect species included in the Brazilian Red List (2, 3). Most threatened species reside in the Atlantic Forest, one of the most endangered biomes in Brazil (4). Specimen collection has never been proved to be a threat to any insect species in Brazil, and no example of overhunting affecting an insect population has been reported (5). Conservation efforts should concentrate on habitat conservation and restoration.

However, recent changes in Brazil's environmental laws include remission of penalties against landowners who illegally remove native vegetation. They also substantially reduce (by 29 million hectares) the areas classified as requiring restoration (6). Together, the new laws mean that insect collectors are charged high fines, whereas landowners receive no punishment for previous illegal deforestation. In addition to being ineffective, these actions lead to a general sense of injustice in the population; it appears that those responsible for the main environmental impacts are always forgiven.

Considering the recent debate about the importance of collecting specimens for science (7, 8), Brazilian legislation should focus on the main threats to biodiversity and not on amateur or scientific insect collectors.

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Brazil's endangered butterflies are at greater risk from deforestation than from insect collecting.

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Parenting: Section deserves a scolding

IN HIS NEWS STORY “An experiment in zero parenting” (special section on Parenting, 15 August, p. 752), E. Marshall wrote about the Bucharest Early Intervention Project’s (BEIP’s) conclusions that foster care is superior to institutional care for unparented children. He noted that the BEIP is famously a randomized design, but did not mention that it did not achieve the goal of isolation of variables. BEIP compared children from socially deprived institutional conditions with those cared for by foster parents trained, funded, and supported at levels far beyond those enjoyed by such caregivers in the United States or Britain (1). Having shown that it is better to be rich and healthy than poor and sick, the BEIP researchers concluded that institutions were bad for children (2), an inappropriate conclusion that conflicts with a recent nonrandomized study concluding that there were no clear differences between large groups of children from typical institutions and typical foster care arrangements in five low-income countries (3).

The Review “The biology of mammalian parenting and its effect on offspring social development” in the same special section (J. K. Rilling and L. J. Young, 15 August, p. 771) also overlooked key points. Rilling

and Young described “parenting” behaviors shared by many species, but they omitted the fact that interspecies differences are so great that Harlow’s famous monkey study might well have had different results if he had used a different type of monkey (4). They also exaggerated the associations between childhood and adult attachment security, and between attachment security and mental health. The related graphic used the ill-defined and outmoded term “parent-child bonding.” The graphic also used the term “securely attached” rather than simply “attached,” implying that secure attachment is an essential goal, rather than a developmental step whose outcome is not markedly different from some other forms of attachment. The Review also failed to address ongoing disagreements about whether forms of attachment should be measured as separate categories or as points on one or more continua (5).

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Parenting: Roots of the sweet tooth

IN HER NEWS STORY “The taste of things to come” (special section on Parenting, 15 August, p. 750), E. Underwood discussed

the flavor learning that happens during specific periods in the womb. Fetal life is also a period during which other systems and organs are vulnerable to adaptations in response to a variety of events that may happen during pregnancy (such as maternal infection, hypertension, and tobacco smoking). Most of these events impair fetal growth, affecting its metabolism and risk for diseases over the course of its life (1). “Programming” effects, moreover, may influence the neurobiological processes involved in reward sensitivity, impulsivity, and cue interpretation, and therefore persistently shape the individual’s response to rewarding stimuli such as palatable foods.

For instance, the hedonic response to sweet taste measured in preterm newborns in their first day of life varies with the degree of their intrauterine growth restriction (IUGR) (2). At 3 years of age, IUGR girls are more impulsive in a task that uses a sweet treat as a reward (3). In addition, different studies demonstrate that individuals born with low birth weight prefer to eat foods rich in carbohydrates or fat, rather than fruits and vegetables (4–7). Given that dopamine signals the salience of the rewarding stimuli,



the fetal programming of functional variations in the mesocorticolimbic dopaminergic system facing palatable foods is putatively involved in these behavioral characteristics (8).

Considering that the current environment promotes the overconsumption of energy-dense, nutrient-poor food, often leading to obesity, the knowledge that some individuals may be predisposed to spontaneously prefer high-fat, high-sugar foods is relevant. It also justifies investments in prevention research and policy

for supporting families and communities to nurture healthy children, considering their vulnerabilities.

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ERRATA

Erratum for the Report: “Observation of the transition state for pressure-induced $\text{BO}_3 \rightarrow \text{BO}_4$ conversion in glass” by T. Edwards, T. Endo, J. H. Walton, S. Sen, *Science* **345, 1261201 (2014). Published online 19 September 2014; 10.1126/science.1261201**