Wild Meat and Biodiversity

[This is a slightly modified version of “A Gorilla on the Grill is Worth Two in the Bush: Wild Meat, Malnutrition, and Biological Conservation” (David R. Keller, lead author), in Peggy Connolly, Becky Cox-White, David R. Keller, and Martin G. Leever, Ethics in Action: A Case-Based Approach. Copyright 2009 Wiley-Blackwell, Malden, Massachusetts. Reprinted with permission of the publisher.]

In the Congo Basin, people have been hunting wildlife for 40,000 years (Bahuchert 1993). Meat from wildlife—bushmeat—is an important source of protein for the people who live in forest border regions (Bennett and Robinson 2000). Today, the diets of 80% of central Africans' include bushmeat (Pearce 2005).

African bushmeat includes ungulates such as forest antelope, known as duiker (Robinson and Bennett 2000), reptiles and large-bodied birds (Bennett-Hennessey 1995), smaller-bodied mammals such as porcupines and cane rat (Fa et al. 1995), and primates. In west and central Africa, bushmeat primates include monkey and chimpanzee (Willcox and Nambu 2007), baboon and colobus (Chapman et al. 2006), even the majestic and endangered mountain gorilla (Grevengoed 2001). Taken together, primates account for between one-tenth and one-quarter of all bushmeat harvested in the region (Bowen-Jones and Pendry 1999).

Primates are particularly desirable bushmeat prey. Compared with other bushmeat taxa, primates are relatively large bodied, diurnal, and live in groups making them fairly conspicuous and easy to kill in number (Chapman et al. 2006). And they are considered exceptionally tasty (Struhsaker 1999).

Bushmeat hunting remained sustainable for generations (Goodall 2004; Cowlishaw et al. 2005b). Recently, however, as human population has grown and trade in bushmeat increased, the harvest of wildlife has become unsustainable. In the Congo Basin, the equivalent of 4 million cattle in bushmeat is killed per year (Bennett et al. 2002), 6 times the replacement rate (Bennett 2002). According to zoologists, bushmeat hunting has resulted in a precipitous drop in the number of apes (Walsh et al. 2003). If continued unchecked, bushmeat hunting likely to led to the extinction of many species (Bowen-Jones et al. 2003).

Primates are especially vulnerable because they tend not to be widely distributed. Most are restricted to forested regions of west and central Africa (Cowlishaw and Dunbar 2000). These areas are undergoing rapid economic
development. Newly cut logging roads, for example, have accelerated bushmeat hunting by providing access to previously isolated forest reaches (Wilkie and Carpenter 1999).

Primates are integral elements of tropical forest ecosystems (Chapman et al. 2006). They are primary frugivores and crucial seed dispersers (Chapman 1995). For example, a tree common in South American lowland forests, the Icecream Bean (Inga ingoides), depends upon spider monkeys to disperse seeds through feces (Moore 2001). Ecological interconnections such as seed dispersion and food webs cause conservationists to worry about bushmeat hunting and made dire predictions about extinction and “empty forest syndrome” (Bennett et al. 2002)—a forest devoid of large animals. The ecology of an empty forest is unknown. Either the forest might appear intact but lack the richness and wonder of faunal life, or the absence of large animals could catalyze an ecological cascade of unpredictable outcome (Redford 1992).

Threats to biodiversity and ecological sustainability have led scientists to decry bushmeat hunting (Whitfield 2003). In 1999 the Bushmeat Crisis Task Force was formed to stop the killing of primates for food (Eves 2001), and Western conservationists have repeated called for the absolute abolition of bushmeat hunting (Bowen-Jones et al. 2003, p. 392).

Humanitarians retort bushmeat is an important source of staving off hunger in central Africa, where one-third of the population is undernourished (Food and Agricultural Organization 2006, p. 33). Here hunting contributes between 30 to 80% of the dietary protein of forest-dwellers (Wilkie and Carpenter 1999). Given this situation, Africans perceive Western conservationists who protest against bushmeat hunting as misanthropic—valuing animals over humans (Dresden 2004, p. 39).

For people living in forest borderlands, the problem of malnutrition is exacerbated by inaccessibility to markets and lack of economic development (Bennett, 2002), problems partially mitigated by bushmeat resource exploitation. Bushmeat for many hungry Africans is more plentiful and less expensive—actually, free—than meat from domestic animals (Dresden 2004, p. 37). Those who own domestic animals often keep them for emergencies or ceremonial events rather than use as an everyday staple (Bennett 2002). Bushmeat is a commodity that can be bartered for other goods and money.

Bushmeat trade is driven by cultural proclivity. Africans favor wild meat over domestic meat for several reasons. ON one hand, bushmeat is traditional African cuisine, and familiarity effectuates preference (Schenck et al. 2006).
Africans also find in bushmeat certain properties that are not found in domesticated animals. Africans claim ingesting bushmeat, especially primate bushmeat, makes one feel stronger and more vigorous, (Dresden 2004, p. 37).

Africans enjoy eating primate bushmeat due to their similarities with Homo sapiens. Interestingly, this is exactly the same reason many Westerners passionately oppose killing and consuming primates (Population and Development Review 2006). This difference in worldview between Africans and Westerners is a bone of bitter contention. Primatologist Jane Goodall blames the imperiled future of primates on the African people themselves for failing to develop a taste for domesticated animals (Machan 2000).

Subsistence for some, bushmeat has become a luxury item for others (Bennett 2002). Its consumption in urban areas connotes socio-economic status (Bowen-Jones et al. 2003, p. 392). Clandestine commodity chains lead from rainforests, down logging roads, through small villages to cities (Bowen-Jones et al. 2003) such as Ousso, Brazzaville, and Kinshasa. These commodity chains are fluid, forming and re-forming during alternating periods of peace and war (de Merode and Cowlishaw 2006). As carcasses pass down these commodity chains, they change hands between hunters, wholesalers, market traders, and restaurant owners who cook and serve bushmeat in stews (Cowlishaw et al. 2005a, p. 141). One such eating establishment in Nairobi is descriptively named The Carnivore (Dresden 2004, p. 35). These commodity chains extend beyond the Africa to Europe and the Unites States, ending up as contraband in the bustling street markets of Paris, Brussels, London, New York, Montreal, Toronto, Chicago, and Los Angeles (Brown 2006). In London, African nationals gladly pay as much for medallions of baboon as filet mignon (ibid.) who want to retain connections to their cultural heritage. These consumers are also Westerners interested in the novelty of eating bushmeat, probably thinking of it as an “organic” specialty.

Back in the Congo, driven by poverty and hunger, hunters are decimating primate populations (Science 2006). At current rates, wild meat supply will drop over 80% in under 50 years (Fa et al. 2003). Unfortunately this vector points toward both extinction for vulnerable primate species and starvation for the indigenous peoples who depend upon bushmeat for protein (ibid.). Present-day reliance on bushmeat is likely to precipitate future starvation and suffering.

There are other anthropocentric reasons to worry about bushmeat consumption. The handling and transportation of animal carcasses creates
pathways for zoonotic infections—diseases transmitted to humans from nonhuman animals—such as Lassa Fever (Dresden 2004, p. 37), Ebola, Severe Acute Respiratory Syndrome (SARS), Human Immunodeficiency Virus (HIV), monkeypox (Bailey 2004) and retrovirus (Wolfe et al. 2004). Epidemiological evidence suggests that HIV arose from Simian Immunodeficiency Virus (SIV) through the butchering of bushmeat (Gao et al. 1999).

Conservationists have expended a lot of effort on cutting off supply. One obvious course of achieving this goal is setting aside protected areas such as preserves and parks, such as the Okapi Wildlife Reserve and Garamba, Kahuzi-Biega, Nouabale Ndoki, Salonga, and Virunga National Parks. Another is to ban trafficking through legislation. Since the 1970s, for example, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has prohibited international trafficking of the products of threatened species.

Yet legislation and litigation is not enough to regulate bushmeat trade. Laws are ignored due to weak enforcement in both Ghana (Mendelson et al. 2003) and the Democratic Republic of Congo (Rowcliffe et al. 2004). Thus some conservationists argue that strengthening governance capabilities of political structures must complement legislation (Davies 2002).

Other conservationists emphasize the need for economic development. It will be virtually impossible, they argue, to stop bushmeat hunting and trade when no other viable economic alternatives exist for impoverished forest inhabitants (Dresden 2004, p. 39). If you are hungry and undernourished, forging a bushmeat meal today for the promise of external aid tomorrow is nothing short of irrational.

Dubious about the efficacy of supply-side curbs, other conservationists focus on psychological strategies like decreasing demand for bushmeat by increasing acceptance of domestic meat (Wilkie and Carpenter 1999).

Given the ecological, economic, and ethnic complexities of the bushmeat issue, common sense suggests to most conservationists that a variety of solutions is needed. First, forest peoples must have alternative income streams than hunting. Second, cultural preference for wild meat must be substituted with preference for domestic meat through education and advertising. Third, and a prerequisite of the second, affordable alternatives to bushmeat must be available (Willcox and Nambu 2007, p. 260). Because these three factors seldom intersect in the same way from place to place, solutions must be varied, flexible, and context-dependent (Crookes and
There is no disagreement that bushmeat hunting, trade, and consumption, as it is currently practiced, is deeply problematic, unsustainable, and portends calamity. Western conservationists generally concur that the outright termination of bushmeat hunting is not socially or economically feasible, that the greatest hope lies in the type of sustainable bushmeat hunting that occurred for hundreds or thousands of years (Bennett et al. 2007) before the socio-economic changes of the twentieth century radically reconfigured the dynamics of human-animal interactions.

Disagreement arises about the relative importance of market-based interventions versus behavior modification of consumers—and, perhaps most pointedly, the extent to which Westerners are justified in involving themselves in African affairs.

References


