Orangutan Foodways

<u>Overview</u>

Of all the Apes the Orangutan is perhaps most dissimilar to us, given the greater differences in our genes, as well as our evolution. While they eat diets similar to the chimpanzee, they are mostly diurnal and solitary, inhabiting forests in various parts of Asia--away from their other, Ape brothers. They will keep their children for as long as four years and while these two generally stay alone, they nonetheless define their own territory. Because these animals are mostly solitary, their day ranges are much smaller, ranging between one quarter mile to almost as much as two miles, with an average of about one half mile per day--and the amount each animal moves is directly correlated to the size of their territory. When the forests contain greater diversity of food, their territories, as you might expect, tend to be smaller at about two square miles. And when the food is more scattered, their territories tend to be larger at around three square miles. Also, since males are three times as large as the females, it is believed they claim considerable more territory. Their routine is somewhat stable from day to day, feeding vigorously in the morning, resting mid-day, moving to another part of their territory during the day and then preparing their nest for the night high into the trees.

Like most other primates, their territories can overlap with others of the same species, including the father of the male and child couple, or other relatives. When the mother and child or other animals contact each other, the relationship can range from friendly to antagonistic, with some evidence suggesting that this relationship will be defined by the availability of and competition for food--perhaps by the degree of kinship as well. When males encounter each other, it tends to be more hostile. When the children reach the age of about four, they leave their mothers and the females will then tend to seek out their own territory. However, the males will tend to roam for some years and because of the greater sexual dimorphism, with the males over twice as large as the females, these males will force sex on the females. But some males are able to displace other dominant males, either by death or conflict, and take over his territory. At that point the male becomes flanged, showing physical signs of his dominance with cheek pads, throat pouches and certain kinds of calls; at the same time their fur becomes long and mottled like dreadlocks so much so that they look like Rastafarians. It seems to me that the flanged male "has it made" at this point as he just kicks back and maybe listens to Reggae and calls the women and they come. It's curious to note that while Orangutans are not social, the males, it seems, tend to have more power over the females likely due to their greater size.

They do not live in Africa with the other Great Apes but only on certain islands in Asia: Borneo and Sumatra which separates the two species from each other, inhabiting both forests and swamps that contain great diversity of plants and likely greater choices for food. Like the Chimpanzee, their diet is about sixty to ninety percent fruit, with lots of focus on figs. However the availability of fruit varies throughout the season and furthermore once every two to ten years many fruit trees fruit all at the same time; during these times, the Orangutans, especially the males, will tend to engorge themselves on fruit, increasing their caloric intake over five times their norm; or more precisely, while adult, male Orangutans weight about as much as their human counterpart, and while they ordinarily consume about 2k calories per day, they will

nonetheless during this time consume as much 11k calories and, at the same time, this typically happens about the same time as breeding. In captivity, Orangutans, like humans, tend to get fat.

During other years and seasons, however, the availability of fruit declines sharply and, at that point, the Orangutans become opportunistic omnivores, eating many different types of fallback foods from both plants and animals: for example, they eat young leaves, buds, shoots, bugs, flowers, sap, vines, orchids, honey, as well as bird's eggs, termites, fungi, caterpillars, ants and other types of food--thus giving them the descriptor: opportunistic omnivore. They can focus on certain plants but, otherwise, they can consume well over one hundred types of plants altogether. As already mentioned, they consume plants containing the alkaloid strychnine which will cause muscular contractions and death in most animals but will not have any effect upon them due to their ability to detoxify the plant. As we have already seen with other mammals, they do practice geophagy, which usually is the eating of clay or mineral-rich soils, which provides them with extra minerals which can help, as far as we know, with several parts of their nutrition: it can potentially provide them with some of the macro or trace minerals that are biologically active; clays tend to have negative charges which are prone to bond with toxins and prevent them from being uptaken; geophagy is also one of the cures for diarrhea.

Because the orangutans are solitary, they lose the advantages of being social--that is, they cannot rely on others to help them avoid predation and find food--which theoretically places them at a disadvantage. Evidently, evolution, for some reason, thought it better to make these particular primates solitary--despite the fact that all the other Apes and primates of similar size tend to be social and thus reap those advantages. To my knowledge, nobody seems to be offering any opinion on this matter. Regarding predation, one species is preved upon by felines and crocodiles and, as such, rarely venture upon the ground. However, another species is preved upon less and therefore feels comfortable travelling across the ground more. But nonetheless it's possible that given thicker, more dense terrain of their habitats, as well as their larger size, that predation upon Orangutans is less significant than some other species--therefore making groups less important. Regarding finding food, it seems probable that they inhabit forests that are more dense with food, with fruit in particular, or, in other words, more food is available per acre of land. Thus, since their food is more abundant and ostensibly easier to find, they may not need to be as dependent upon others to help them. Or, in other words, they may have landed in some of the best of habitats, far away from the challenges of Africa and they just did not need the extra protection of the group.

Curiously enough, Orangutans, though solitary, are one of the most intelligent of the species, considering both their encephalization and their observed behavior--thereby, giving perhaps another exception to the rule that larger groups, leads to smarter individuals. I hold it evident that larger groups would require greater intelligence but, in this case, it could be that Orangutans just chose to devote their available intelligence, not to the complicated dynamic of social relations--but to other tasks, like finding food and remembering the requirements of their habitats. Whatever the case, some researchers are now considering them amongst the

smartest of the primates, not too far away from the Chimpanzee. Orangutans in the wild live to fifty or sixty years and live longer than many others.

Source: "Primate Info Net." WNPRC, primate.wisc.edu/primate-info-net/.