



# Smithsonian Center for Materials Research and Education

## *Topics in Conservation Science Lecture*

### The chemical keys to understanding primate foraging behavior



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In the world of primatology, some believe that primates seek out food by knowing which parts of their surroundings have nutritional value. However, this view takes no account of how primates make decisions and how they could possibly know the nutrients a food contains. Nutrition is a human science, not learned directly from what our senses tell us. More logically, from a cognitive view, primates forage on the basis of what their senses tell them - senses such as vision, smell, taste and texture. Unfortunately, investigating this isn't easy: primates occupy parts of the world that are mostly remote from labs. The physical/mechanical properties of foods do not survive storage and must be measured in situ, but there are great advantages in doing chemical analyses in the field too. Recent molecular work on both taste and smell has revolutionized our knowledge of the primate sensory system.

This presentation will describe a field lab that quantifies more of the chemical features of foods that primates may perceive, and remote labs settings for when field conditions render such work impossible.

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