A Day in the Life of Winslow Homer:
An Interactive Tour of Primate Behavioral Ecology

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URL: WinslowHomerDay.net

Abstract: *A Day in the Life of Winslow Homer* is a map-based web application, where players can see real data, pictures, and descriptions of a group of wild capuchin monkeys collected by field primatologists. We aim to develop the app into a helpful educational resource about primate behavior and evolutionary ecology.

Learning Objectives

A Day in the Life of Winslow Homer (abbreviated as *Winslow Homer Day*) is a web application which teaches players about wild primate behavior, shows the selective environmental pressures that drive the evolution of primate intelligence, and gives players insight into the scientific study of primate behavior. We aim to provide an engaging interface to allow users to explore real, detailed observational data collected by the Lomas Barbudal Monkey Project.

Design

Players can follow a day in the life of Winslow Homer (Figure 1), a real, wild baby capuchin monkey. *Winslow Homer Day* aims to teach players about primates by telling a story about his life and giving players a character they can relate to.

Figure 1: Winslow Homer, on the left, is groomed by his aunt Dante.

Winslow Homer's GPS track is plotted on an interactive map for players to follow along (Figure 2). Players can click on colorful icons to see real observational data in the categories: *Food, Friendly, Infant, Grooming, Play, Sex, Submission and Fear, Aggression, Coalitions, Vocalizations,* and *Miscellaneous* (Figure 3). Players can also see pictures of the monkeys, and read informational snippets about capuchin behavior and its evolutionary context.
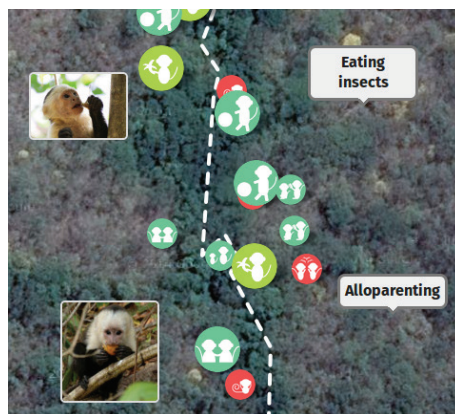

Figure 2: Map interface with GPS track, behavior icons, pictures, and text boxes.
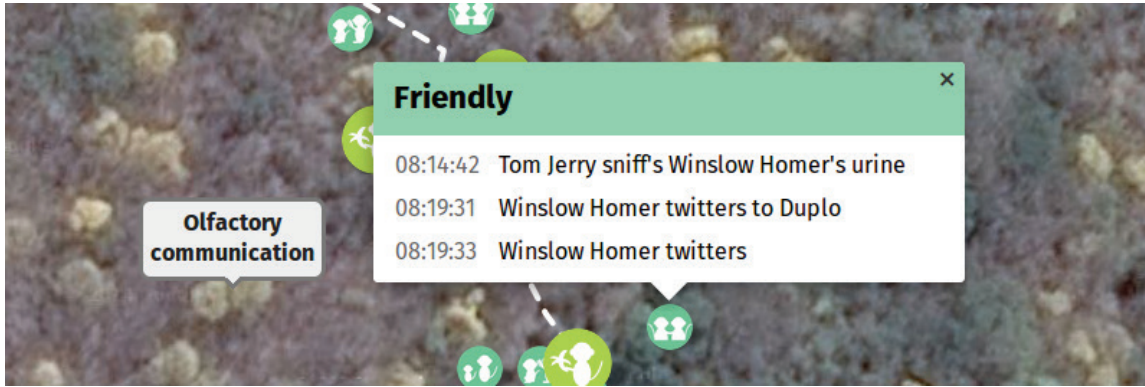
Figure 3: Players explore real behavior data collected by primatologists.

About the Lomas Barbudal Monkey Project

Followed by researchers for over 25 years, the capuchins of the *Lomas Barbudal Monkey Project* have become one of the most widely studied wild monkey populations in the world. Researchers collect rich observational data using a system of codes for statistical analysis, along with demographic data, non-invasive hormone and genetic samples, and audio and video recordings.

Long-term field studies of primates give us important insight into primate conservation, ecology, evolution, and human origins. The project has focused its research most intensively on social dynamics, communication, social traditions, development, life history strategies, and educational outreach.

Usability Challenges and Future Work

The map is saturated with a glut of data about Winslow Homer, but casual usability tests show that players have a difficult time accessing and navigating through all of the information; some test subjects report being overwhelmed.

To smooth out this problem, we are working on ways to give players a clearer overview of Winslow Homer's life at the very beginning. We plan to implement an easier way to take a "tour" through the map, such that a player can click a "next" button or use a slider-bar widget to move through the information. This new, more directed, navigation mechanism should also help us improve our storytelling.

We are working on designs for a feature that would allow players to quickly drill down to see information about specific topics they are interested in, maybe using a free text search or an organized list of tags.

Initially developed for larger screen sizes, we are working to improve the experience of *Winslow Homer Day* on mobile devices to broaden our potential audience. We've started developing a responsive design that adapts to smaller screen sizes, and we continue to make performance improvements on lower-powered devices.

Once the project has matured, we would like to translate *Winslow Homer Day* into Spanish to make it accessible to a wider audience, including people in Winslow Homer's home country of Costa Rica.