Choose your own ecology report, or: "what I did to make up for missing the snowiest winter EVER"

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Abstract: A common complaint in the rapidly developing world of ecology is that the science— as it gains legitimacy, a foothold amongst the rigorous natural sciences, and an ever-burgeoning vocabulary of its own— is losing its focus of applicability and its sense of urgency— losing, in fact, touch with those people who need it most; including you, yes, you, the reader. But no longer. We, the Dartmouth Biology FSP of 2001, have condensed our most important research, our most groundbreaking findings, the créme de la créme, the "hells why didn't they think of that years ago" stuff-that-dreams-are-made-of reports into this one, single, easy-to-read interactive multi-adjectival uber-document: the world's first Choose Your Own science report. Our science. Your imagination. Adventure beyond belief and half a bottle of Blackcock. Enjoy.

Key Words: chowdah, say it, chowdah!

Introduction 1: "What's in the Hole?" A comparative study of hole-dwelling creatures in neo-tropical habitats

Hole-dwelling creatures and monsters have plagued humankind since the beginning of time. Yet the distribution and abundance of these organisms have yet to be adequately described in the ecological literature. Travelling extensively in Costa Rica and Jamaica provided us with an ideal research opportunity to discover "what's in the hole", especially given that the abundance of holes in these regions has been described as "a lot" (S.E. Hampton, pers. communication). In this comparative study we sampled the distribution and abundance of hole-dwelling creatures (*Holingus dwellingus*) and monsters (*Holingus dwe-O.*&#@^!!!) in several habitats: a tropical dryland forest (Palo Verde), a tropical montane cloud forest (Monteverde), a tropical lowland forest (La Selva), and a coral reef (Discovery Bay Marine Laboratory, Jamaica, West Indies). We hypothesized that hole-dwelling creatures and possibly monsters would be found in the holes, and predicted that hole-dwelling creature and monster diversity and abundance would increase with hole size.

If you find out "What's in the hole" go to Methods 1! If you decide to place snakes and jaguars in caged deathmatches, go to Introduction 2!

Introduction 2: "I call the big one Bitey": caged deathmatch to eradicate the majority of tropical fauna

Physical might is a common adaptation to the diverse assemblage of selective pressures in the Neo-tropics, with fauna displaying a vast repertoire of things that hurt. From the stings of *Acacia* and bullet ants to the teeth of crocodiles, from the gnash of jaguar claws to the bite of the fer-de-lance, tropical fauna proves time and again that life is cruel and painful ($t=5.68$, $df=8$, $P=0.0173$). The goal of this study was to determine which species best "brings the pain" (Friedenberg 2001); i.e., which species would emerge as ruler of the jungle from a tournament of paired cage matches.

If you have no moral objections to this study go to Methods 2! If you decide to take it slow and test sloth behavior from a first-person perspective, go to Introduction 3!

Introduction 3: "My life as a sloth": An observational behavorial study, in first person

The three-toed sloth has been shown to be the goofiest animal on the face of the earth (whatever, 1999). Ever seen a sloth get surprised? Their eyes bulge and their mouths

gape— in slow motion. Try it. Try it in a mirror—to take a full 30 seconds to look surprised. Better yet, have a friend surprise you and then try to do it. You can't. No one can. Because no one has ever tried to enter the psyche of a sloth— to, if you will, become a sloth. Until now.

In this revolutionary study sloth behavior was observed as never before— from a first-person perspective. No more inferences about what a sloth is doing or thinking as it sits, curled in a ball, completely immobile in the top of a tree day after day after day. No more speculation about what it must feel like to go to the bathroom just once a week, and to have to spend over an hour climbing down a tree just to do so. No more sleepless nights wondering what's behind that goofy grin. Thanks to this pioneering study, the inner world of these majestic beasts of the canopy is now at hand.

If you explore sloth behavior from a first-person perspective, go to Methods 3! If you like Keywords, check them out!

Methods 1: "What's in the hole?"

In order to find out "What's in the hole?" researchers explored holes with their hands, arms, and, if possible, heads, throughout the Neo-tropics. Holes were identified by visual inspection and verified as holes by a secondary, nonpartisan party. Once holeness was confirmed, holes were classified as a) hand/arm-sized, b) head-sized, or c) "boy, that's going to be a tiiiight fit"-sized. Body parts were then placed in the hole as follows: for a) (hand/arm-sized holes): hands and as much of the arm as possible. For b) (head-sized holes): heads and as much of the upper body as possible. For c) ("boy that's going to be a tiiiight fit"-sized holes): as much of the body as possible. Researchers were encouraged to identify creatures and remain in the hole for as long as possible. To standardize effort, this often included holding researchers in the holes, often against their vociferous objections.

If you find out what is in fact "in the hole", go to Results 1! If you find out how to decide which one to call Bitey while enraging the World Wildlife Foundation, go to Methods 2!

Methods 2: "I call the big one Bitey"

Caged deathmatches were set up as follows:
Round 1: Jaguar vs. Sloth
Round 2: Paca vs. Agouti
Round 3: Tapir vs. Leaf-cutter ants
Round 4: Bushmaster vs. Crocodile
Round 5: Round 1 winner vs. Round 2 winner
Round 6: Round 3 winner vs. Round 4 winner
Round 7: Round 5 winner vs. Round 6 winner
Round 8: Round 7 winner vs. Craig D. Layne

Rules: No tags allowed. No holds barred. You do not talk about "I call the big one Bitey."

If you find out who wears the crown and commit numerous violations of the Endangered Species Act in the process, go to Results 2! If you choose a more passive route and see the world through slothy eyes, go to Methods 3!

Methods 3: "My life as a sloth"

In order to simulate sloth behavior from a first-person perspective, half a bottle of Blackcock Whiskey™ was ingested as quickly as humanly possible (2-way ANOVA, $F=38.24$, $df=8,4872.3$, $P=$woooohoo). Notes were taken at subsequent intervals when the author could find a pen and some sort of flat and/or squishy surface on which to write.

If you find out what life as a sloth is like, go to Results 3! If you were born on a Tuesday, yay !!

Results 1: "What's in the hole?"

There was a statistically significant relationship between hole size and hole-dwelling creature and monster abundance (r^2=0.84, df=8, P=0.034). A MANCOVA analysis also showed a statistically significant relationship between hole size, hole-dwelling creature and monster abundance, and the number of researchers who did not return from their holes (MANCOVA, F = 1.23, df = 4, 5, P = 0.678910eleventwelve).

If you want an in-depth discussion of the ecological significance of "What's in the hole?", including suggestions for further study, go to Discussion 1! If you find out who won the cage matches and ticked off PETA, go to Results 2!

Results 2: "I call the big one bitey"

Round 1: Jaguar vs. Sloth
Despite exhaustive searching, no jaguars found. Sloth declared winner by default. Still on its way to medal stand. Or bathroom.

Round 2: Paca vs. Agouti
Despite exhaustive dichotomous keying, difference between paca and agouti yet to be determined. Two large rodent-like animals roped together, identified as a single "pacagouti," and told to fight itself. Fails to do so. Round declared a draw.

Round 3: Tapir vs. Leaf-cutter ants
Tapir declared winner after leaf-cutter ants fail to carry it to their nest. Tapir revealed to actually be a "heffalump." Disqualified.

Round 4: Bushmaster vs. Crocodile
Bushmaster bites crocodile. Crocodile eats bushmaster. Crocodile rushes to hospital, writes dramatic personal account of bite, renounces violence and takes to lecture circuit promoting "one love." Audiences hoping to see "talking alligator" demand refund.

Round 5: No contestants

Round 6: No contestants

Round 7: No contestants

Round 8: Due to lack of contestants Craig D. Layne challenges entire FSP to Roman Knuckles; declares himself "King of the Jungle." Rafe calls him Bitey. Craig votes Rafe off the island.

If you explore the many far-reaching implications of this study for ecology today go to Discussion 2! If you "become sloth" go to Results 3!

Results 3: "My life as a sloth"

Tree. I tree. Sloth tree. Not prey. Not prey hawks for. Not for to eat by hawks I sloth. Tree. I.

If you have any idea what that meant go to Discussion 3! If you had a thing for "Blossom" as a kid, you're not alone!

Discussion 1: "What's in the hole?"

Future studies should not try this at home. Or anywhere.

If you start a new adventure, return to the Abstract! If you thought this whole thing was "Abstract," you're pretty witty!

Discussion 2: "I call the big one Bitey"

You do not talk about "I call the big one Bitey."

You do not talk about "I call the big one Bitey."

If you want to read some ground-breaking research, check out the study on Atta colombica *foraging rate versus tree DBH and distance! Now that's science!*

Discussion 3: "My life as a sloth"

The bottle was warm and the beer warmer. The midday sun beat down and life on the street slowed to a stifled waltz. Crowds in slow motion. Buses belching fumes. Vendors hawking everything from mini-skirts to tomatoes. A dog barked. And as another swig of beer found its way to my parched lips the first thought of the day rolled into my brain like a freight train coming into station: Damn, those were some bad beans and rice.

FSP 01: soul ecology #1 4EVA

Literature (to get you ex)Cited

It'd been 10 years but she looked as good as ever. Hair down, eyes done up, blue jeans and a T-shirt like she was still the hottest thing on two legs. And as far as I was concerned, she was. I put the ratchet down and walked out from behind the '53 Chevy. "Nice car," she said.

"Thanks," I said. "I call the big one Bitey."

Then I remembered I was a goddamned sloth.