



**GET TO KNOW
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Pokémon Go & Natural History

Did you know that Pokémon Go creator Satoshi Tajiri was an aspiring entomologist? Living in rural Machida, Japan, Tajiri's childhood was spent immersed in nature among rice paddies, forests and streams.

"Every time I found a new insect, it was mysterious to me. And the more I searched for insects, the more I found," he told *Time*. "As I gathered more and more, I'd learn about them, like how some would feed on one another.

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Pokémon Go & Natural History

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So I stopped bringing them home. But I liked coming up with new ideas, like how to catch beetles. Tiny discoveries like that made me excited."

Not long after, the forests were developed and the land he knew disappeared. Tajiri faced the same disappointment that city players feel when inundated with Pidgeys, Zubats, Weedles and Rattatas.

Tajiri created Pokémon to counter his loss. Pokémon was his way to adapt to a changing world, and now thousands use Pokémon Go to escape to parks, where uncommon Pokémon reign.





Pokémon Ecology: Elements

Aristotle's four elements — earth, fire, wind and water (remember *Captain Planet*?) — have been transformed into categories of fantasy Pokémon superpowers.

“Superpowers” or attack/defenses of Pokémon translate to real animal kingdom tactics. Pikachu's “thunder shock” is like an electric eel; Horsea's ink spurt and smokescreen mimic a protective defense of a real-world squid. Horsea can even squirt at flying bugs from the surface of the water, a trait borrowed from the archerfish.





Pokémon Ecology: Habitat

HABITAT

The Pokémon you discover are not random. Niantic, the company that partnered with the Pokémon Company to create the mobile app, had a hand in developing the original Google Maps, so it's no wonder that, for instance, water Pokémon are found near actual bodies of water.



Using the Pokémon element types and simplified geographic-information systems (GIS) data, Pokémon are assigned to a particular habitat based on water, soil, climate and vegetation probabilities.

Pokémon Go pulls from this scientific method to re-create an alternate world full of ostrich-like Doduos in grasslands, turtle-like Squirtles near the river and animated-walk Orimer creatures.



Pokémon Ecology: Elements

THE ORIGINS OF PIKACHU

Like the linguistics of J.R.R. Tolkien's Elvish languages, all successful creative endeavors borrow from the past. Tolkien took from Finnish. For biologists, Latin is the go-to.



To create memorable and universally recognized names for the thousands of species on this planet, scientists assign two Latin words, genus and species, to each organism based on its unique characters.

For example, the sci-fi-sounding binomial name for the common raccoon, *Procyon lotor*, means "before-dog washer," likely describing the raccoon's primitive dog form and endearing habitat of "washing" its meal.

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“‘Pika’ is the sound Japanese say an electric spark makes,” Tajiri says. “And ‘chu’ is the sound a mouse makes. So *Pikachu* is like an electric mouse.”

The Pokémon themselves have a vocabulary and tonal repertoire that often derives from their name: *pi*, *pika*, *pika pika*, *chu* and *pika chuuuuu*.



Pokémon Ecology: Population

POPULATION

There are two types of diversity measures on the hunting grounds: species abundance and richness. In general, rare Pokémon are found in low-abundance, high-richness habitats.



The exception to the rule? In Texas state parks, rare Pokémon occur in abnormally high abundance.

The biggest scientific discrepancy? In the game, evolution describes an action most closely related to metamorphosis, which is only done by insects and amphibians. Or, is it that all Pokémon, plant or mammal, hatch from eggs?

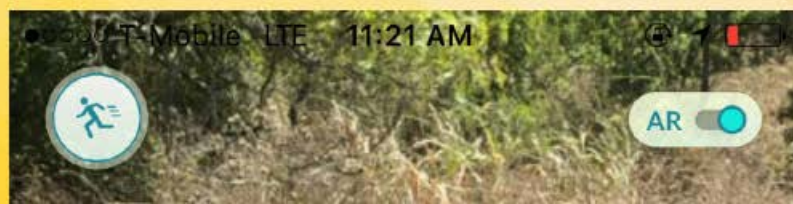


Rare Nests & Hot Spots

“Hot spot” is an ecological term for a place where there’s great abundance and diversity of plants and animals. Biologists travel from across the globe to study these pristine areas.

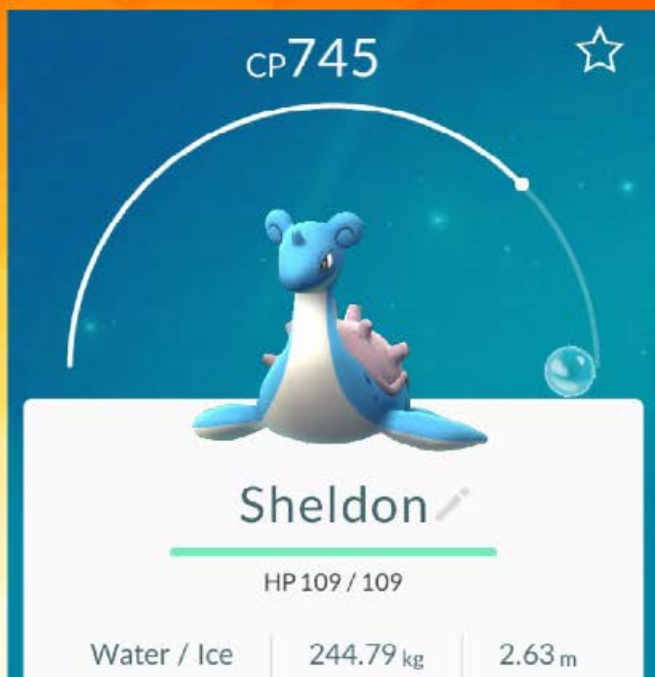
Found somewhere between good cell reception and pristine environment, Pokémon have their hot spots, too. When they find an area suitable to their tastes, they spawn. A lot. When a Pokémon trainer enters a Texas state park, they can get lost for hours searching the breeding grounds until they emerge with enough candies to evolve.

Life’s better outside — and so is Pokémon hunting. Traverse the wilds, and the Pokémon will follow you. And if you’re Roy Sanchez (self-reported level 24 and gym holder of 20) from Austin, your girlfriend will follow you when you travel to evolve Vulpix.





Mastering the Game



Parks are rare nests, which mean they spawn a disproportionately large number of an uncommon Pokémon. Touring a state park is a quick way to get a high CP uncommon Pokémon and evolve in one day.



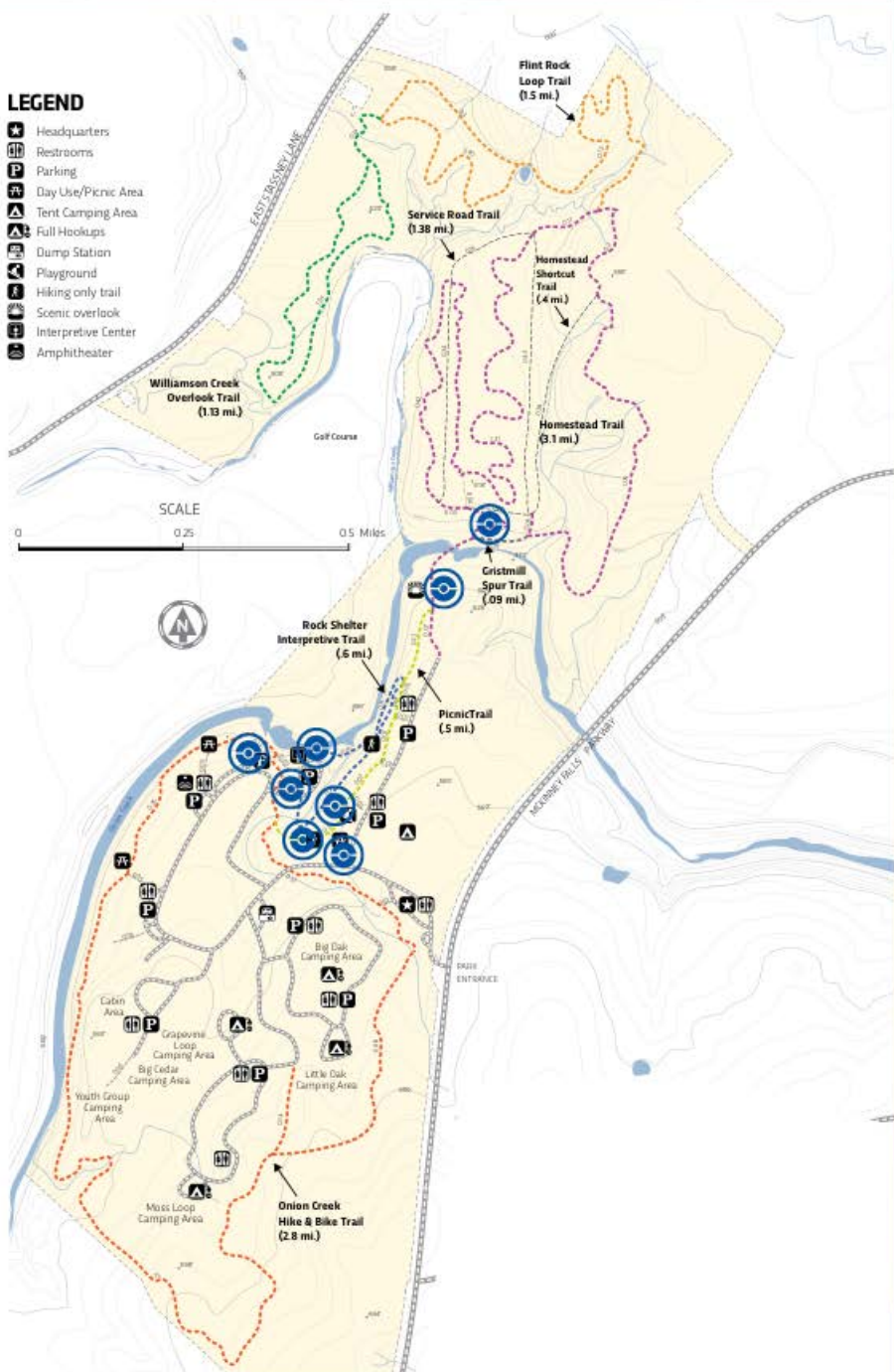


McKinney Falls

TAP HERE TO CHANGE VIEW

LEGEND

- Headquarters
- Restrooms
- Parking
- Day Use/Picnic Area
- Tent Camping Area
- Full Hookups
- Dump Station
- Playground
- Hiking only trail
- Scenic overlook
- Interpretive Center
- Amphitheater





McKinney Falls

TAP HERE TO CHANGE VIEW

2:34 PM

cp132



Bulbasaur

HP 27 / 27

Grass / Poison Type

7.11 kg Weight

0.62 m Height

21970 STARDUST

16 BULBASAUR CANDY

POWER UP 600 1

EVOLVE 25

2:36 PM

cp130



Dratini

HP 27 / 27

Dragon Type

4.74 kg Weight

1.97 m Height

21970 STARDUST

13 DRATINI CANDY

POWER UP 600 1

EVOLVE 25

2:36 PM

cp140



Exeggcute

HP 36 / 36

Grass / Psychic Type

3.28 kg Weight

21970 STARDUST

EXEGG

POWER UP 600

EVOLVE 25

Bulbasaur

Dratini

Exeggcu

**POKÉMON SEEN
IN THIS PARK**



Dispose of your waste properly.
Bonus points for leaving your
PokéStops and newly conquered
gyms cleaner than you found them.