In a grassland next to a creek near Tracy, California, the experienced field biologist was asking, “what would a ringtail be doing here?” We had just tentatively identified a couple of faint tracks as probable ringtail, its trail heading toward relatively barren open space whose vegetation had been decimated and trampled by earlier cattle grazing. After my general answer about ringtail habitats, she asked again, “no I mean what would it be doing here?” thus opening the box of mystery surrounding ringtails, in my experience as well as other naturalists’. In fact Mary and I were only 65% certain about these tracks, arriving at our conclusion primarily because they weren’t quite right for gray fox, whose tracks were also in this place only a few feet away. Ringtails, we had discovered over numerous tracking episodes in recent years, are able to create tracks that quite resemble house cat, gray fox and kit fox among some other possibilities. Not that their tracks just look like these others, but that they can look different from one situation to the next, as though the ringtail’s feet and way of moving can morph in some scampish way.

A year ago, we were following a direct-registering gray fox’s tracks from a gravelly wash up through sagebrush and rabbit brush, when we began wondering why this fox was behaving like a weasel with its quick changes of direction and choices of small corridors to move through. After the trail returned to the wash where the soil was better, we realized the fox had become a ringtail, the word “gotcha!” seemingly audible somewhere nearby. This was the first time I had seen a direct-registering ringtail trail, and thereafter we began seeing these often, as though all the ringtails had now changed how they moved just to contradict the tracking field guides. Admittedly this “fox” we’d tracked left prints that were quite distorted as the adjacent photo shows, both from some apparent gripping of the toes while moving, as well as from freezing and thawing of the wet gravel. But even when its tracks are clearer, the ringtail can sow confusion. One damp winter morning I was tracking along a dry riverbed running through Bakersfield, California, beneath a bridge. Here were abundant tracks of opossums, feral cats, striped skunks and raccoons as would be expected within an urban environment, but running parallel to a house cat trail with its four-toed round tracks, was a ringtail trail with its round tracks, four-toed because the fifth wasn’t registering, and both trails this time showed indirect register in an alternating or diagonal walk pattern. Primarily, the heel pad shape alerted me to the difference between the trails as the size and shape of the tracks were very close and the ringtail’s hind track quite round.

Another time in the same place, I was tracking a San Joaquin kit fox with its direct-registering trail in coarse gravel, and parallel to this trail was a ringtail trail; this time the ringtail was direct-registering as the kit fox does, and the ringtail hind tracks registered differently, with a more elongated shape than they’d shown in the example above, so that the overall shape of the double print was more fox-like than cat-like. Here, only the claw marks of the kit fox distinguished its tracks from the ringtail’s.
Normally when you distinguish tracks, there are fine details in a good print to rely on, such as the three lobes on the bottom of a cougar track. With a ringtail, the hind heel pad is sometimes horseshoe shaped, but other times there are three lobes on its bottom as shown in the accompanying photo. Could it be that this part of the foot grips differently in this case, for speed, balance or mood? The little fifth toe, on the inside of the hind track, is sometimes visible but can be quite faint, and sometimes one wonders whether this mark was from a toe or was created by an insect walking on top of the track. (Looking at a slight assymetry in toe position also helps.)

“What is the ringtail doing here?”

We return now to the question we started with, because finding ringtail evidence is often a surprise outside of classic habitat such as the canyon country in Utah and Arizona where they can be observed in night in campsites. Actually these animals can be found in desert, riparian areas, old-growth forest, chaparral, pinon-oak woodland, montane forests and dry tropical habitats among other places. But habitat descriptions have had their caveats, such as the phrase in the Mammalian Species account, “...provided there are rocky outcroppings, canyons or talus slopes present” in ringtail habitat.

Well there we were, examining ringtail tracks in Death Valley with no rocky outcropping nor talus slope anywhere nearby, leading us to assume that this ringtail had not done its proper reading. Denning and feeding are two imperatives that drive habitat use, so let’s examine each with regard to the ringtail. Dens have been found in rock crevices, under logs and tree roots, under boulders in creek bottoms, in tree hollows, and in rural buildings. In open terrain in Death Valley we found a ringtail den in a burrow dug by an antelope squirrel. In such habitat, ringtails seem to walk the fine line between the creative and energetic foraging they are known for, quickly and directly in vulnerable situations, tails over their backs, instead of using their foraging gaits.

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The other answer to this section’s question involves a ringtail’s diet, and for that allow me to share a few descriptions from the scientific literature. Basically ringtails will eat mammals, insects, fruits, arthropods, birds and reptiles. Both their facial whiskers and the sensitive hairs on their forepaws allow them to feel inside small spaces for food.

“One ringtail...in Tucson...began raiding a private outdoor aviary. He would reach through the mesh and then grab, pull out and eat parts of the exotic occupants, including a nice parrot.”

“Utah ornithologists discovered that a ringtail...had managed, surprisingly, to get at a peregrine nest and eat the two fledglings in it...’The eyrie was located about 70 feet from the top of a 400-foot, smooth, vertical, Navajo Sandstone cliff and was seemingly inaccessible to mammals, yet ringtails...had somehow found access to the nest.’”

“[We] observed a ringtail feeding on the nectar of Agave havardiana in Big Bend...lapping on 11 flowers.”

“Principal plants [in Texas] eaten by the ringtail were cedar, hackberries...persimmin, mistletoe...acorns, cactus...soapberry, wild plums...and dogwood...Among mammals, cottontails, fox squirrels, ground squirrels, white-footed mice, cotton rats, pocket mice, wood rats, harvest mice...deer [carrion]...Among [birds] taken were the bluejay...town...mourning dove,...yellow-shafted flicker...thrasher, robin, bobwhite quail, indigo bunting, song sparrow, and warbler...Small numbers of millipedes and more of centipedes were taken. Of spiders it captured a considerable quantity. Remains of these and of scorpions, daddy longlegs...and ticks were found...Among the orders of insects taken were grasshoppers, moths and butterflies, beetles...ants, bees, flies, dragonflies, and lace-wings.”

“Ringtails scale cacti with apparent impurity...”

“No trace could be found of our pet [ringtail] for several weeks [after we released it]. The house...had six very large and old Norway spruce about it. These trees, and those of the neighborhood generally, supported a large population of red squirrels. Several times in the weeks following the escape, I found red squirrel remains under these spruce trees, usually the remains consisted of entire tails, feet, and pieces of skin and fur. Returning home late one night during a snow storm, my wife and I were amazed to see our Bassaricus revealed by the car headlights on a low limb of one of the spruces, with a small mammal in its mouth. It quickly disappeared up the tree. At the base of the tree was the tail of a red squirrel...[Another] hiding place was eventually revealed a week or so later when one of our neighbors saw a strange animal in her wood shed. The ringtail [lived] beneath a stack of shutters...There was no nest, but the feet, wings and feathers of more than a dozen starlings were scattered about under the shutters.”

With this information, now bring your imagination to the ringtail tracks you find. What is it doing here? What a great tracking question!
In the western U.S., the narrow-leaved milkweed, *Asclepias fascicularis*, grows at many elevations and is a good survival plant, providing both food and fiber. It’s easy to grow from seed and once it becomes established, provides an ongoing supply of stalks that can be used for cordage.

One advantage this species has over the broader leaved ones is that, in the fall, the outer “bark” can be peeled off easily, dried and saved for future fiber projects. (Other milkweed species we have used normally require some tedious effort to get a lot of fiber.) There is a window of time after the narrow-leaved milkweed’s seed pods have opened but before their stalks turn brown, in which this method will work.

Cut the stalks toward the base and break off a piece about an inch long from the base; you will find that the inner stalk separates from the “skin.” Then, pull half of the skin all the way down as you would peel a banana, followed by the other half. These pieces should be dried in bundles, and when dry, the bundles can be rubbed vigorously between the palms and then manipulated between the fingers to soften the fibers and get rid of the “chaff.” This process is best done outdoors because there will be a lot of debris floating in the air as the fibers are softened. The finished fibers are very strong. I’ve made bowstrings, bow drill strings, and nets with them.

Pruning a stand of narrow-leaved milkweed will stimulate nice growth the following year and is therefore a good plant for a garden or yard. Of course milkweed attracts Monarch butterflies and is a host for its caterpillars, but many other insects including bees, wasps and other butterflies also feed on the blossoms.

In early summer, the emerging flower buds can be cooked and eaten, as well as the young green pods before the fibers inside become too stringy. And the fibers from the mature seed pods make a good coal extender for a friction fire. *Asclepias* seeds may be ordered from the Theodore Payne Foundation in Sunland, CA. We have some at Earth Skills also if you call or write.

**Further reading about ringtails**

The following are excellent resources for visualizing ringtail movement:


**II. Fibers & Other Uses of Narrow-leaf Milkweed**

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**Left below:** Newly stripped bark, dried bark bundle and prepared fibers. **Middle below:** Carrying net made from milkweed fibers. **Right below:** A chrysalis and emerged Monarch from this year’s milkweed patch.