

Practicing Environmental Etiquette in Utah's Deserts



Cryptogamic soil in the desert, consisting of cyanobacteria, algae, fungi, lichens, and/or mosses can require over a century to recover following disturbance by footsteps, tires, or other means.

Discovering Deserts

World-renown for its desert climate and recreational opportunities, Utah's southern desert attracts millions of visitors each year. With nearly 75% of the land in Utah being public^[1], much of it is dedicated to recreation and tourism in the form of National Parks, Monuments, National Forests and open space. The state hosts five iconic National Parks, all of which are located in the southern half of Utah. These five parks accounted for nearly 9.5 million visitors in 2012 alone^[2].

As popular as Utah's deserts are, they are also very diverse and fragile, and can be highly affected by those that want to spend time there. Though the desert may seem resilient and hardy, it is in fact quite delicate and can be damaged simply by a footstep in a fragile place. In order to maintain and protect our deserts for the natural environment, for our own benefit and for those that follow, we should reduce the damage that we may inflict. Fortunately, this can be accomplished while still being able to recreate. This guide will help to define ways in which we can minimize our impact while exploring the desert.

Plan and Prepare

- Get to know the layout of the area you plan on being in, whether it be by map, compass, GPS, or some combination of the three. Helpful resources can be found at the area's visitor center or land management agency. A list of major Utah land management agencies can be found on page 3.

- Learn the location's rules and regulations that are set by the management agency. Many of these are made to help protect the environment as well as enhance the user experience.
- Use reusable containers and bottles for food and water to reduce the potential of waste while out in the desert.

Traveling, not Trampling

- Travel on existing trails, paths or other surfaces such as rock or gravel. This will help reduce the chance of destroying fragile plant species such as the Wright Fish Hook Cactus^[3] and Cryptogamic soil (also known as Cryptobiotic). Cryptogamic soils are often found in arid climates and are bound together by microorganisms such as bacteria, algae, fungi, lichens and mosses. The irregular consistency of these soils aid in plant development, conserve water and nutrients, and reduces erosion. Cryptogamic soils are extremely fragile, and can take decades to come back to their original state. Backcountry users can significantly impact cryptogamic soils if they wander off-trail or set up camp in crusted areas^[4].

Waste Disposal



Hikers properly dispose of waste after spending a day on the trail at Zion National Park, UT.

- Pack it in, pack it out. This is a term you will hear very frequently anytime you are recreating in the outdoors. Make sure to take everything that you brought out with you when you leave; it is good practice to leave an area better than the way you found it.

A common misconception when in the outdoors is for organic waste to be disposed of in the environment (orange peels, etc.). Organic waste can be especially harmful in the desert environment as the decomposition of organic material is far slower in an arid climate. The slow decomposition rate stems from deficiencies in essential nutrients as well as less water, which has a direct relation to the amount

of available decomposers in the desert biome^[6]. Reduction in bacteria and microorganisms that readily breakdown organic matter is due to the fact that there is less plant life, and plants have adapted to need less water in the desert environment^[7]. Organic matter can last months to years (depending on desert conditions and type of organic matter) before decaying in the desert.

- Just like organic waste, human feces does not break down very well in the desert. If possible, carry out human waste; this can be done with one of several personal sanitation devices such as the CleanWaste 'Wag Bag.' If you can't carry out your waste, then dig a cat hole. Cat holes should be dug 6 inches deep and should be at least 200 feet away from camp, water sources or drainages. Always pack out toilet paper and other personal hygiene products.

Staying the Night

- Camp in existing areas, or on surfaces such as rock or gravel that are at least 200 feet away from water sources or drainages. Avoid impacting untouched areas or altering an area for your camp. Good campsites are found, not made^[5].
- Try using a stove for cooking or warmth instead of creating a fire pit. If you do need a fire, try to use established fire rings or pits and make sure to put it out completely before you leave.

Be Considerate



A desert tortoise (*Gopherus agassizii*) thriving in a healthy, unpolluted desert environment.

- In a historical hot spot like the desert, it is always good to leave what you find. Others want to be able to see the natural and historical relics of the wilderness as much as you do, so don't remove or alter them.
- Refrain from accidentally introducing non-native species. Check your boots and shoes to make sure that this will not occur. Many foreign plant species such as cheat grass can have a higher competitive

ability than those of the desert, and will have drastic effects on the environment.

- Observe wildlife from a distance, and try not to disturb them during mating or nesting seasons.
- Wildlife can become habituated to human food if they are fed food left out for them to scavenge. Seal food in lock-tight bins and keep scraps off of the ground as much as possible.
- Other visitors are likely to be in the area when you are recreating. It is good practice to protect the natural quality of the landscape by remaining quiet and leaving the land as it is. Abstain from leaving scars on trees or rocks as it looks very unnatural and leaves long lasting impressions.

Major Utah Land Management Agencies

- National Park Service (NPS) Utah: <http://www.nps.gov/state/ut/index.htm?program=parks>
- Bureau of Land Management Utah: <https://www.blm.gov/utah>
- Utah State Parks: <http://stateparks.utah.gov/parks>
- U.S. Forest Service, Utah: <http://www.fs.usda.gov/contactus/r4/about-region/contactus>
- U.S. Fish and Wildlife Service, Utah: <https://www.fws.gov/our-facilities>

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