

# Ecological Principles

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## Abstract

This paper lists and discusses the 7 ecological principles we apply in the various camps we went to. They assist our trip planning, affect our actions and guide how we present ourselves to locals and other campers.

## 1 The 7 Ecological Principles

The overarching concept is to minimize the impact of camping to the camp site and other places visited. This is called the Leave No Trace (LNT) Principle. Here are the 7 principles that help us practice LNT.

1. Plan ahead
2. Recognize durable surfaces
3. Dispose of wastes properly
4. Leave what you find
5. Minimize camp fire impact
6. Respect wildlife
7. Respect for other campers/ locals

## 2 Plan Ahead

It is important to know the place. A site survey is best. Asking friends, who have been there, is also good. At the minimum, search the web for blogs about the site and if there are contact details, give them a call to confirm expectations. It is important to manage the expectations of the participants of the camp.

It is also important to plan the food. Minimize the waste. You don't want to go hungry or lack nutrition for the camp activities, but at the same time, you don't want to bring too much and have food spoil. We prolong the life of meat using various techniques. Do not bring raw meat. Pre-cook the meat. It can be boiled, salted, cooked in vinegar and smoked. Bringing a cooler will help with the meat as well allow you to enjoy cold drinks at the camp. You should have your trail mix, but for people like me, it's never the same without rice and some hot dish. It is advisable to bring your own butane stove. We normally consume 1 butane can per overnight for 6-person meals. One kilogram of meat can serve as a single dish meal for a group of 6-7 people along with one kilogram of rice. Pots and pans are pretty standard. Just note that you don't cook rice in thin stainless pots. Kitchen knives, cutting boards, kitchen utensils and pot holders are important too. The type of stove/ fuel to be used also differs with altitude. They will all fire up, but the heat transferred is altitude dependent. Another thing that's altitude/ location dependent is the type of tent to be used. The most common are the dome tents. These are best for beach/ clearing settings where there's some shade and no strong winds. Lastly, consider the local communities that you will pass along the way. Are they friendly? Should you get local guides? Are there some private properties that you'll be passing through? In case you get into trouble, where are the places you may seek help along the way?

So plan ahead. Consider your food amount and food preservation. Consider the altitude when choosing camping equipment like tents and stoves. Consider the people in the area. The success and failure of the camp largely relies on good planning.

### 3 Recognize Durable Surfaces

One of the most common fails of mountain climbing is falling off cliffs and ridges. This can be avoided by carefully considering where you step. On inclined paths, you would want to put your weight on stones that are fairly buried in the path and wouldn't give way. If you find loose rocks that masquerade as footholds, it would be a good idea to pick them up and put them at the side of the trail. A lot of it also is balance. Going down slippery slopes might be more manageable sideways. You really aren't 100% sure of your surface until you are already stepping on it. So, a good idea is to slowly shift your weight when you are unsure. This way, you can shift back in case you determine the surface to be more dangerous than it looked.

When going up a steep portion of the trail, leaning forward and grabbing on rocks and branches can help. If possible, you would want your hands free and your bag still. This can be achieved by having a backpack as you day pack. The bag should be suited to your size. If it has waist and chest straps, that's better. Also, in case you fall, you can position yourself in midair to land on your backpack. About holding onto rocks, if this is near at a river, there might be some lizards or snakes sun basking. So look where you place those fingers. About grabbing onto vegetation, you want to grab on green healthy plants. The brown dead plants will have branches that are likely to give way once you pull. An example of this is bamboo. Stalks that are a bit green are strong. Just watch out, some parts may appear

to have scales. Don't hold those parts. They are itchy to touch. Plants with fine hairs are also probably itchy to touch. Strong tree trunks are good. Just be aware that some have ant trails. When crossing rivers, aside from facing the current and walking sideways, you would want to step over the rocks. Some rocks that would be stable on land, may be loose in underwater, strong current conditions. The concept of durable surfaces also comes into play when looking over summits and ridges. The edges may be composed of loose soil and rock. Be wary that while taking in the beauty of the view or taking a picture on a ridge, you might be in unstable ground already. This also goes for tents. Set up somewhere that has durable (non-shakey/ flimsy/ slidey) ground. We found that level and semi-shaded grassy and sandy areas are nice for dome tent pitching.

So to avoid embarrassing and sometimes fatal accidents, make sure that you, your shelter and your things are on stable, durable ground.

## 4 Dispose of Waste Properly

This is directly tied to the Leave No Trace Principle. Ideally, what you bring up, you'd also carry down. For a lot of camping sites, there are trash bins or areas already setup. Make sure to segregate as needed and not to fill up or make the bins overflow. Again, you best be prepared to carry home the non-biodegradable trash you bring with you.

To a degree, some biodegradable waste will be left during your camp. This brings us back to the Leave No Trace Principle. For example, when cleaning pots, pans and mess kits, soapy water with some bits of food will be going to the ground. Make sure that to do the cleaning at least 20 meters from the river system so as not to pollute the body of water with soap and detergents. In case there are no toilets available, find suitable, semi-secluded areas wherein to do your business. When you are expecting the absence of comfort room facilities, be ready with a trowel. Dig some soft earth, defecate there and cover up the hole with soil and place a rock on it so that other people won't use that same spot too soon. You can also leave a piece of tissue under the rock to convey to fellow campers that that particular spot has already been taken. Do not throw bottles over cliffs or to the ocean. One of the things we did was to enjoy some hard alcoholic drinks while exchanging stories in the camp night. We never finish off the bottle. It had always been the case that a local guide or such will be happy to dispose of the bottle for us along with some of the contents.

While guidelines exist, there are a lot of times that we have to be creative in disposing of our wastes during camping. That is fine as long as we always keep in mind the Leave No Trace Principle for campers.

## 5 Leave What You Find

There is always that urge to take a pretty shell or starfish from the beach. On mountains, there are bird's nests, ores and colored stones. In caves, there are stalactites and stalagmites. You might even get across some historical artifacts. As responsible campers, we should leave what we find. Take your pictures, then go.

This is again part of the Leave No Trace Principle, where as soon as you go, there's very little to say that you were there. If you chance upon historical artifacts, the proper protocol is to inform the government department responsible for that as well as the local government in the area. Note down the location and the government will send people to go assess the find. Rock formations look cool, but it took them literally hundreds of years to look that way. Chipping of portions deprive other campers of the beauty that you enjoyed when you looked at it. When caving, minimize holding on to relatively thin stone formations. These may be brittle limestone and may break off. Lastly, it is common for locals and campers to set their things outside their tents while they sleep or on tree branches while they bathe. At some point, you will do the same thing. Leave what you find.

This principle allows other campers to also enjoy the place. Exceptions are when you see trash. Clean up climbs, where you actually leave the place cleaner is very commendable. Also, if you see valuables dropped on the floor, make sure to take it to the lost and found center, or your camp councilor.

## 6 Minimize Camp Fire Impact

Camp fires leave soot. On beaches, this leaves dark patches on the sand. In forests, it may reignite and cause forest fires.

If, like me, you're just about as happy without a campfire, then save the effort and forget the risks. But if you really want it, there are several things to consider and prepare to make the experience a fun and safe one. Check for campfire sites. In most camping sites, there are already designated campfire areas. These have cleared surroundings, some concrete bottom and a perimeter separating the fire area and the ground. If one of these campfire sites are near enough to where you are staying, make sure to use them instead of starting out your own. In case you will be starting your own campfire without the benefit of a prepared site, try to see if you have a metal sheet around such as the lid of metal drums. You can build the campfire on this and have a means of collecting the ash and the soot. This minimizes both the aesthetic impact as well as the risk of forest fire.

Once you have your site, it will be time to make the fire. Traditionally, you need tinder, kindling and dry fire wood. Collect enough amounts of those three things before starting. Also plan an arrangement of the wood so that adequate air can flow and allow the fire to transfer from the lighter to the tinder to the kindling to the wood. Create a sort of C shape with the tinder, having the opening face towards you. Use a lighter or flint or match to start a flame on the tinder. The kindling should be arranged in a way that one the tinder catches fire, the flames will burn and move to the kindling. The wood pieces should be in a way that the kindling can burn them as well. If you have gas around, you can pour gas on the wood to make them catch fire easier. It will be useful to put matches and lighters in waterproof containers. Normally if the match gets wet, it's dead. For the lighter, you can wait for the flint inside to dry so that it can create sparks again. You can water proof matches by putting molten candle wax on the heads. I haven't tried it though.

After the campfire, try to dispose of the ashes properly. It will be good if they can be

buried. Be careful of the hot wood pieces. Besides the risk of getting burned, those wooden pieces can still catch flame given good wind conditions. Many forest fires have started that way. You can put sand and soil on the remnants of flame to make sure it's dead. Dousing it with water also works, given that you have enough water to spare.

The summer nights in the Philippines are hot enough already and since we had camping stoves, I never found the need for campfires. Except maybe for roasted mallows. And smores..

## 7 Respect Wildlife

Aside from human campers, who trek the great outdoors once in a while, we have our furry, feathered and slithering friends that make use of nature's facilities much much more often.

Humans have been in the world long enough that most other creatures know that getting close to us is not a good idea. The wildlife will be avoiding the trails and clearings frequented by humans. It is usually a lot safer to stick to these trails and clearings. In the off-chance that some creature crosses our path or we leave our trodden paths and cross theirs, let us try to keep to our own business. Throwing stones at snakes and other creatures are not a good idea. Trying to slingshot birds out of the sky is even worse. Unless, we're trying to get our dinner amongst them, it would be a real pity if any of the animals get hit and injured in our wake. I've noticed in some trails, such as in Mt. Daguldol in San Juan, that there are guide dogs going up and down the trail, sometimes alone, sometimes in small packs. They help show that path as well as keep the path safe. They're friendly. The ones in Mt. Manalmon are even friendlier, allowing you to pat them. We really shouldn't poke them with sticks. Snakes normally notice you and leave before you notice it. It will not leave, however, if it were protecting its eggs. It will stay and fight. So if you chance upon snakes, you can assume that they're either sun basking on a rock or protecting their nest. Stay clear of it. For sea activities, there might jellyfish. Jellyfishes come in a huge variety of sizes and colors. Some are edible and practically harmless. Some pack serious damage in their tentacles. They normally come out to sea shores at certain times. It's best to ask the locals about them. Same goes with sea urchins. Also watch where you step and where you swim.

The sound of the critters in the wild plays a big role in the nature experience that we love. Let's keep them happily singing.

## 8 Respect for other Campers and Locals

Camping brings you far from the reach of ambulances and hospitals. The health insurance in this case is the mutual care and concern between you, other campers and the community on site.

When campers meet each other on the trail. It is customary to greet each other and smile. At the same time, if you meet fellow campers in a pinch, it is customary to assist them. It is also good to be courteous to the locals for the same reasons. Having other campers and locals around makes the trip safer. It is consistent with the 2nd principle of

camp safely, the safety in numbers principle. When you are in a position to help other campers in need, consider the 3rd and 4th principles of camp safety also, the know your limits principle, and the save yourself first principle, respectively. If you are not confident of your ability to help, call on others instead. When calling for help, consider safety principle number 1, have a buddy principle.

Respect for others also includes being sensitive to their preferences. While loud music might be your thing, most of the campers go to the outdoors to listen to the peaceful and quiet sounds of the forest. So unless you are certain that it is ok, keep sounds low and the music to yourself. There's a chance too that the trail you'll be following cuts through private properties. It's important to be mindful of the surroundings and conscious of the people who live there. This can shown in the proper handling of candy wrappers and cigarette butts. There might be enterprising locals who would persistently try to sell you stuff you don't want. Be firm, but respectful still. Probably, if you tell them that you have no money, they'll go away.

All in all, Filipino's are known to be hospitable. Just be respectful and the campers and locals will almost always offer you the million tiny tips that make your camping experience a truly amazing one.