

BARK'S GUIDE TO GROUNDTRUTHING



The most effective forest activists know what a proposed logging or development plan looks like on the ground and understand the likely impacts of the proposal. To become a stronger advocate for a place, it is important to get to know the area yourself. It is easy to get started; all you need is an inquisitive mind, an ability to observe and take notes, and an interest in protecting our lands and waters for future generations.

Groundtruthing is Bark's method of gathering site specific information about an area proposed for logging or development, which we use to to fight destructive proposals. Groundtruthers collect stories, images, information to inspire the public to support the protection of special places and oppose policies that allow destruction of public lands for corporate profit. Perhaps most important, groundtruthing is also a motivating way to visit the places you are working to protect.

WHY GROUNDTRUTH?

Knowledge is power. When we face agencies beholden to corporate interests, we need to gather a lot of high quality information, inspire a lot of people, and make strong legal arguments in order to keep our wild forests standing.

Resource managers write planning documents from the point of view of an agency that is unscrupulous in the "need" for the project. Therefore, the descriptions of the area in the documents that they provide will often read with an urgency that does not always exist. Groundtruthing allows you, Bark and the public to witness the true characteristics of the area. When we groundtruth, we always find information that is not included in the planning documents or that is inconsistent with the plan or impossible for mitigation

There is also a legal benefit to groundtruthing. Under the National Environmental Policy Act (NEPA, more on that below), the federal government is legally mandated to identify all potential environmental impacts from a proposed project. If they fail to do so, then this claim can be included in a legal challenge.

Also, a big part of groundtruthing is being a witness to the destructive practices of companies and complicit agencies. We need to let them know they are being watched closely. This will make them less likely to bring about unnecessary ecological damage.

KNOWING NEPA & OTHER PUBLIC INVOLVEMENT IS IMPORTANT

Many statutes and laws on resource management include language about "meaningful public participation" in the process of planning and reviewing a proposal. Knowing this part of the law and any guidance that it might give for the process of including the public is very useful for being prepared.

For any project that includes the federal government (permitting or action), the agency uses the National Environmental Policy Act (NEPA) for guiding their process. Bark hosts regular trainings on this law and has many resources about the steps that the agency must go through. Most importantly, **you have a right to be a part of this process.** If you feel like you are not getting information you need to make meaningful comments or are not being kept in the loop, then it is important for you to keep good record of your efforts to stay involved. Being able to show a history of involvement without reciprocation will back up your claims that the agency did not keep you well informed.

GETTING ON THE GROUND

It can be time-consuming to accurately locate and orient yourself on the ground, but it's important to get this right! Once you have a starting place and aligned your maps, make a plan for your groundtruthing. One approach is to walk the perimeter of the unit, or the area you are working to document. This helps you understand relative distances and gives you time to take notes on the surrounding and adjacent area. The "cumulative impacts" of a project are an important component of the environmental review process and knowing what might be impacted beyond the specific project area is as important as the direct impacts. For instance, they may be logging trees in one location, but if this creates edge habitat in the surrounding trees, what impacts might that have? Wind blowdown, increased predation, invasive weed expansion, etc?

Once you have seen the broad area of the project, you can plot a strategic route and document the details. Using your maps and things you already know about the area, prioritize what to start with. Documenting water sources and streams or significant land features, such as an area prone to landslide, are good places to start.

Make a plan that you can finish in the time you have, and don't put pressure on yourself. It is not your task to find the last Itchy-Tailed Red-eyed salamander, whose protection will stop the project. The point is to get good information about the area you are looking at to add to the larger picture of the whole proposal. Documenting the way a forest stands now or the way a stream looks today or other unique features of the land is most important. The agencies that are responsible for inventorying the potential impacts will be looking for ways to shortcut the project. When we present compelling evidence that the agency has significant data gaps, we can make a stronger argument to the media, to the courts and to our legislators that our concerns are not being heard.

FLAGGING & MARKERS

Most projects have flagging or marker system to communicate between different surveying, planning and engineering crews. These can be somewhat cryptic. Taking note of it is important. When you return from the field, if you were not clear what the flagging or markers were communicating, ask for this information from the agency overseeing the surveying.

Using your own flagging for getting back to a location can be helpful. If you are on public land, this is only a good idea if you are planning to come back within a short period of time. By confusing specialists who may be using flagging to communicate between each other, you may be prohibiting them from doing the necessary work to find that rare species or good reason for not going forward with the project.

MAPS

Every fight to protect our land comes down to a conversation over maps. If it is worth fighting for, you probably can't make your point with just a field visit or a meeting at the location of the proposal. Maps will help you put your points into context of a larger landscape. The agencies and the companies know this, as well. They will have maps, too.

Maps you need

There are a lot of great map resources. Topographical maps show the elevation and shape of a landscape and water system. They can be purchased at most outdoor stores. Recreation and road maps show places of interest as well as help find the best route to get to your site. Your library likely has a section where they store historical maps that will give you loads of information about how we got to where we are. The State Historical Preservation Office (SHPO) also can help in this direction. Google Earth is the best resource for viewing a bird's eye view of the area you are groundtruthing. You can also create resources for others using Google Earth. This software is free and can be downloaded at www.google.com.

Their Maps

Most of the maps that exist in the world today are created using Global Information System (GIS) and Global Positioning System (GPS) software. Although, there are many resources for learning this software and creating maps on a computer, the software and equipment are expensive and not accessible. Most of the agencies and companies have specialists to make the maps that they are releasing to the public. When communicating with the agencies, ask for everything you need. If the Forest Service puts out a map showing a project that they are doing environmental review around and they forgot to include the road numbers on their maps, making it harder to find the project, write them and ask for a new map. This might be harder to do with a private company, but the agencies will be inclined to help you. If they do not respond or do not help, contact an organization with resources to help you file a Freedom of Information Act.

Our Maps

Remember the last time you were trying to describe directions to someone and you realized it would just be easier to draw a map? What did you start with? How did this make your directions easier to understand? What system of symbols did you use? These basic questions are exactly how you want to begin mapping.

Assuming you do not have access to GIS, hand drawing the maps is a good next option. Messing around on a computer with Word or Illustrator can be frustrating and may not make a better map. You can always scan your map drawings and have them as electronic files if you need to. Alternately, taking an existing map and photocopying the map to the scale that is best for your notes and then drawing directly onto the paper can eliminate the difficult task of trying to draw to scale or label everything correctly.

Using symbols and color-coding can be a very helpful way to put a lot of information onto a small map representation. Your maps can also be a place to organize your photos using a number system that connects to the location of the photo you took.

Be creative in your use of mapping for explaining your points. For instance, when Bark recently documented an illegal ATV trail in the national forest, the Forest Service assured us they had closed off the trail. We had asked them to take a more proactive stance on ATV riders in that area so we went out and inventoried the rest of the roads in that area to show that just closing that one trail was not enough. We used a mapping system to collect the places where ATVs were entering the forest and showed that there was a much larger, systemic problem than just the one trail.

PHOTOS

Using video and photos in groundtruthing is essential. However, it can be very challenging. With digital photography, this part of groundtruthing has become immensely easier, but it is still hard to know if you got the right image when you are out on the ground.

Some tricks to helping you get a good photograph for use in groundtruthing:

- You don't need to be the next Ansel Adams. While getting one or two heartbreaker photos is useful for outreach, having images that show the concerns you have is more valuable.
- Using people, objects or perspective to show relative size.
- Keep your photos organized. There are several free, online tools for organizing your photos. Bark uses Flickr, so we can link to other people who are using it as well.
- Name, tag, note your photos as soon as you are back from groundtruthing. It is amazing how fast your memory of a place can start to get fuzzy. Don't waste a minute of clarity you had when you were standing on the site.

NOTETAKING & SURVEY FORMS

Attached to this handout is an example of Bark's survey forms. We use survey forms because it helps to have a sort of checklist to not forget features of the forest we are trying to identify. It also helps us standardize the information from many different people over a long period of time. It may help to create a personal survey form before going into the field, or at least a checklist to remember what you might want to be noting.

Additionally, the notes you take will have a heavy influence on how you organize your thoughts when it is time to write substantive comments. Give yourself time in the field, rather than hope that it will be clear later. If you are using acronyms be sure to stay consistent with them. If you are making drawings, use arrows to connect your notes to places on the map or drawing.

At times, trying to get it all down will become overwhelming. Putting your thoughts into question form can sometimes relieve the feeling that you don't know enough to be making observations. You may not be a soils expert and find yourself unsure of what the science is about a pipeline trench being dug into a stream, but you're pretty sure you have concerns. Try taking notes in question form; what will happen to the sediment caused from this trench? How will they stage their equipment on a sandy beach that floods every year? Will they have to remove that large tree that seems to be holding the sand bar from disappearing?

WHAT TO LOOK FOR

This can get tricky. It is a balance between trying to look for that unique feature or species that should cause alarm and being sure you don't miss the diversity of the whole area. Here is a list of some things to consider keeping an eye out for:

- Types, ages and sizes of trees - include overstory and understory trees. Measure approximate d.b.h. (diameter at breast height =4½ feet from the ground on the upward slope).
- Amount, size (diameter and approximate height) and age of downed trees and snags. Look for critter holes.
- Any distinctive vegetation. Even if you can't identify something, note its existence - for example, "lots of mushrooms" as opposed to "lots of *Ramaria stunzii*."
- Elevation.
- Slope- steep? Flat?
- Aspect - which direction the slope is facing. (N,S,E,W)
- Signs of past tree cutting and regrowth within cut areas.
- Blowdown and potential for blowdown - especially prevalent along edges of clearcuts, on ridge tops.
- Signs of fire. (Blackened Trees)

- Roads in the area, and their condition and use. Are they gated or otherwise closed? Are they being used even though closed? Are they in poor condition? Are culverts plugged? Pay special attention to proposed new road construction, noticing what type of slope the road is proposed to traverse and what kind of forest will be impacted.
- Signs of landslides.
- Wildlife, wildlife habitat and animal prints.
- Soil conditions - dry, wet, rocky, etc.
- Recreation resources - trails, campgrounds, etc.

Riparian Areas: These are streams, lakes and wet areas - anywhere there is water.

- Identify them in advance on the maps, or look for signs such as devil's claw, skunk cabbage and cedars.
- Look for fish or suitable fish habitat.
- Note the condition of streams - flow, clarity, sedimentation, woody debris, and pools.
- Note whether streams flow year-round or dry up in summer.

RESOURCES

Bark recommends the following field guides:

Plants of the Pacific Northwest Coast, Jim Pojar and Andy MacKinnon

Cascade-Olympic Natural History, Daniel Mathews

Mushrooms Demystified, David Arora

The Sibley Field Guide to Birds of Western North America, David Sibley

Scats and Tracks of the Pacific Coast, James Halfpenny

There are many other good field guides, but these are an especially good start for groundtruthing and identifying ecological systems and species.

WHAT TO DO AFTERWARDS

The power of your part is in the whole of everyone else's groundtruthing efforts. Creating a system with other groundtruthers to be sure your notes and observations are included in a larger picture of the impacts that the project will have is essential. Bark uses a binder system. Each timber sale has its own binder, clearly labeled. Within the binder, they are organized each the same so it is easy to find the document, map or notes you were looking for.

Also, find a date to go back out! Things change season to season. The span of a project review can sometimes be several years. Make time to go back in a different season and observe the proposal under snow or in a different bloom.

And be sure to go back when you are not groundtruthing, take the time to appreciate what we have now.

Nature does not hurry, yet everything is accomplished. Lao Tzu