Informing Trail Signage Design

How to enhance the visitor experience

By Donald T. Meeker

For many parks, trails provide the dominant attraction, but too often the signage placed there to inform visitors about a trail—providing maps, info about length and difficulty, guides to the flora and fauna—often leaves them a bit bewildered. We miss a critical opportunity if trail signage planning and design does not enhance the trail experience for visitors. Consistency, continuity, clarity, readability, and good design—all assist in providing visitors with a sense of confidence and security, which leads to a better trail experience and repeat visits. This overview highlights approaches to building information into trail signage design.

From the trailhead to intersections and locations where trail conditions change, this process reveals how sign functions can be related to one another for design continuity. It identifies applications for trail signing and then refines and integrates that kit-of-parts in the most effective way to inform a user for the type of trail being signed.

While the examples shown have been designed for front-country recreation trails, they can also be used in back county or "primitive" trails as well. Of the many sign types described and illustrated here, the integration of information and panel design reduces the number of signs needed in most instances.

Unfortunately, there is no single method for park signage because such trail features such as length, complexity, accessibility, and utilization (hikers, walkers / cyclists, those on assistive devices) determine design. With the application of an overall signage system, these deviations from standard signs can effectively be worked into the overall plan so that the visitor experiences visual consistency.

Three primary components form the basis of good trail signage design:

- The park trail map
- Application of the Architectural Barriers Act that fits the trail
- Design standards that visually unite signage

The Park Map

The park map, a picture of the overall trail system is, in our view, a critical part of the plan. Optimized for ease of view when standing before the map at the trail entrance the map should employ a scale that depends on the size of the park and the complexity of the trail system. A clearly noted "you are here" locates the user within the map. We recommend using the skills of a cartographer.

A comprehensive map should identify boundaries, land conditions, structures, roads, trails, points of interest, scale, direction, a legend, and other necessary points of information. It is also important that the map reflects what the visitor sees on the ground, e.g. defining the connection of trails that merge.

Our approach to mapping typically names each trail segment and shows each trail using a color that pops from the neutral background. We distinguish the spine trail, or dominant route from loops, connectors, or intersections. The trail section color and name make the overall system easier to read and learn. Using dotted lines is discouraged because they confuse trail intersections. Forested land masses are drawn lightly; small details—from buildings to water features—are noted by symbols. A clear map needs little explanation and, as a result, has a modest legend.
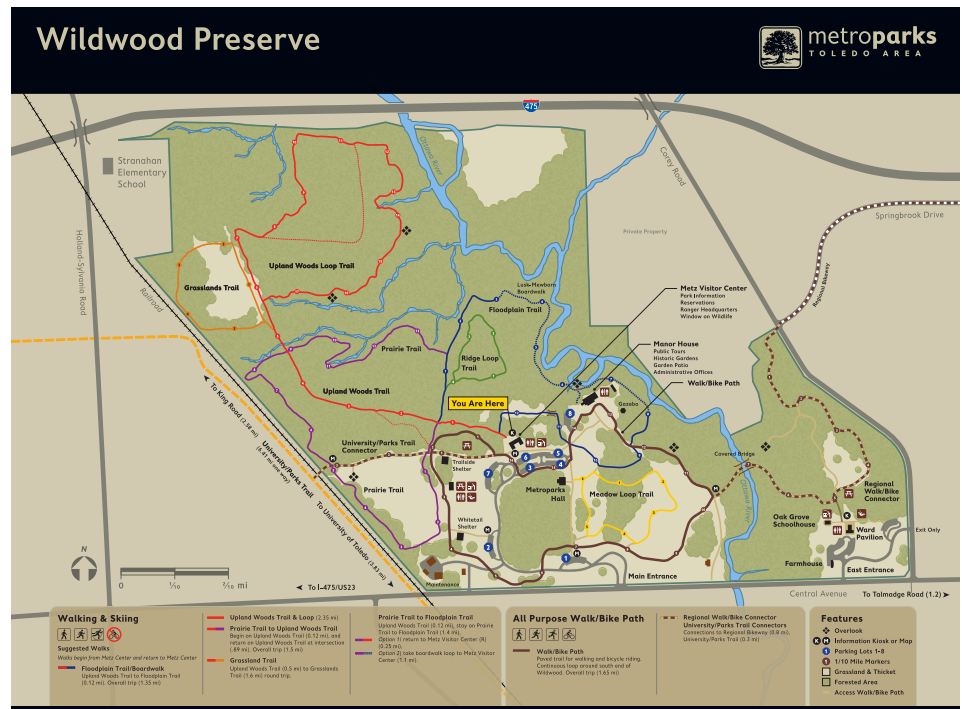
Regional recreation trail organized with spine trail, loops, and connectors. Entire length of trail is level and with hard packed surface. Trail intersections identified for all directions of approach. Waypoints are set at tenth mile throughout.

Trailhead panel with accessibility information and trail rules.

Interpretation of the Architectural Barriers Act (ABA)

The authors of the current regulation (ABA 1968 42 U.S. Code 4151, Chapter 10) 1071.2 - 1017.9) used common sense. The regulation language "to the extent practical" implies that a park manager is not required to remove a large boulder or provide other domestication. However, there is an obligation to inform visitors of such trail conditions as slope, grade, cross slope, surface, and width.

The referenced method to identify conditions is extremely detailed and better a guide for a fully accessible trail. This rule informs a hiker of features or conditions so that the user—with or without physical issues—won't walk down a grade they cannot climb back out.

The common federal method to describe a condition identifies the percent that does not meet the ABA standard (e.g., 14 % of the trail is narrower than 60" wide). That message posted on a panel is ambiguous. Alternatively, the trail map, trailhead sign or waypoint markers can describe the conditions. A clear diagram marking the location of a challenging feature and/or a sign at a trail bifurcation can identify the best accessible route. In addition, noting the information in advance of the condition is respectful of the user and enhances their safety.

Inclusion of Design Standards

Design standards are the guts of a signage system and include the selected type face(s), color(s) and formats that create a consistent communications standard. While sign types vary by function, design standards maintain consistency. Basic rules include fonts of medium stroke width that are sized for a particular proposed viewing distance and with clear contrast against the background.

Good design and planning can enhance the function of various types of signs and can communicate information in an understated way. Here are some of the many functions trail signage needs to do:

Typeface Selection

Campfire
Campfire

Palatino Bold/Regular

Campfire
Campfire

Avenir Next Bold/Regular

Shown are two typical typefaces in medium and bold weight; a modern roman and san-serif. Both are adaptable for signing.

Color Palette

Forest/Trees	Information/Trail
Base/Background	Danger/Trail
Symbols/Trail	Trail
Warning/Trail	Instruction/Trail

Graphic Elements

The National Recreation Symbols are handy for posting information on maps, rule panels and site specific safety signs.

Signage by function

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Conclusion

Good trail signage supports the visitor experience of your park. Along with good planning, it can help turn an ordinary hike or a routine run into wonderful memory. Here are a few take-aways:

- Information should be planned from the trailhead to the end point.
- Consistency is critical.
- The map is styled to clearly show trails and attributes.
- Information for physically challenged is informative for all trail users.

Trail Identification

Traditionally employing the flag style—single or double face signs—are generally smaller than panels mounted close to the ground. Sizing of the flag signs depends on sightlines and scale of the area.
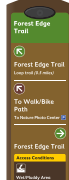
Sheldrake Preserve Trail

Waypoints:

Usually created as small profile, double-sided post, these markers are most often placed at 1/10 mile increments on the trail. The graphic panel incorporates the abbreviation of the trail name, trail color, and distance back to the trailhead. Long trails may use ¼ or ½ mile increments. Runners use theses to plan and time a route and seniors as a security marker. The location is also referenced on the map.

Guidance
Name + Color
Waypoint
Condition

Forest Edge Trail

Trail Guide Signs:

Every intersection on a trail directs the hiker to stay on the route or turn on to an alternative route. The guide sign displays the trail names, destination of each, and arrow in each designated trail color (distance optional). In most cases, the reverse side of the panel presents similar guidance back to the trailhead.

Safety:

Although precautions may have been addressed in the orientation panels, a site-specific panel is advisable using a trail marker at the location where the warning applies. The legend includes bold-lettered instructions, as specific a description as necessary, and panels that further describes conditions and consequences if they are not obvious.

Secor Metropark

Trail Map:

Trail plotting may include 1/10 mile waypoint markers to measure distances for runners and as location reference points for seniors and others to direct emergency service providers. Unimproved trails also need to include ABA compliance information.

Orientation Kiosk:

Usually a covered structure, the trail orientation structure may be upright without roof (for front country vs back country). The primary content is the trail map. Trail rules, emergency call numbers, description of trail conditions—surface; slope, width, and cross slope—may be described and/or displayed. On a larger panel, we include signage using a modular panel display so that information and orientation are easy to read and displayed without clutter.

Rules and Regulations:

This panel delineating etiquette and expectations is ideally limited to no less than five or more than eight primary rules with succinct descriptions and symbols to aid readability. This information may also be placed as a module in the orientation kiosk.

Welcome Panel:

Possible panel content includes credits (agency/grants/sponsor), with emergency access information (911) and information about waypoints on the map. This panel is generally a module in the orientation kiosk.

Trailhead Panel:

The trail head panel consists of a single panel that includes title, description of the trail with summary of trail surface and slope, width, and cross slope, and related safety warnings. Generally, the trailhead includes a trail map (small scale) with conditions noted. At this location, primary rules are featured, using description, related symbols, and trail conditions.
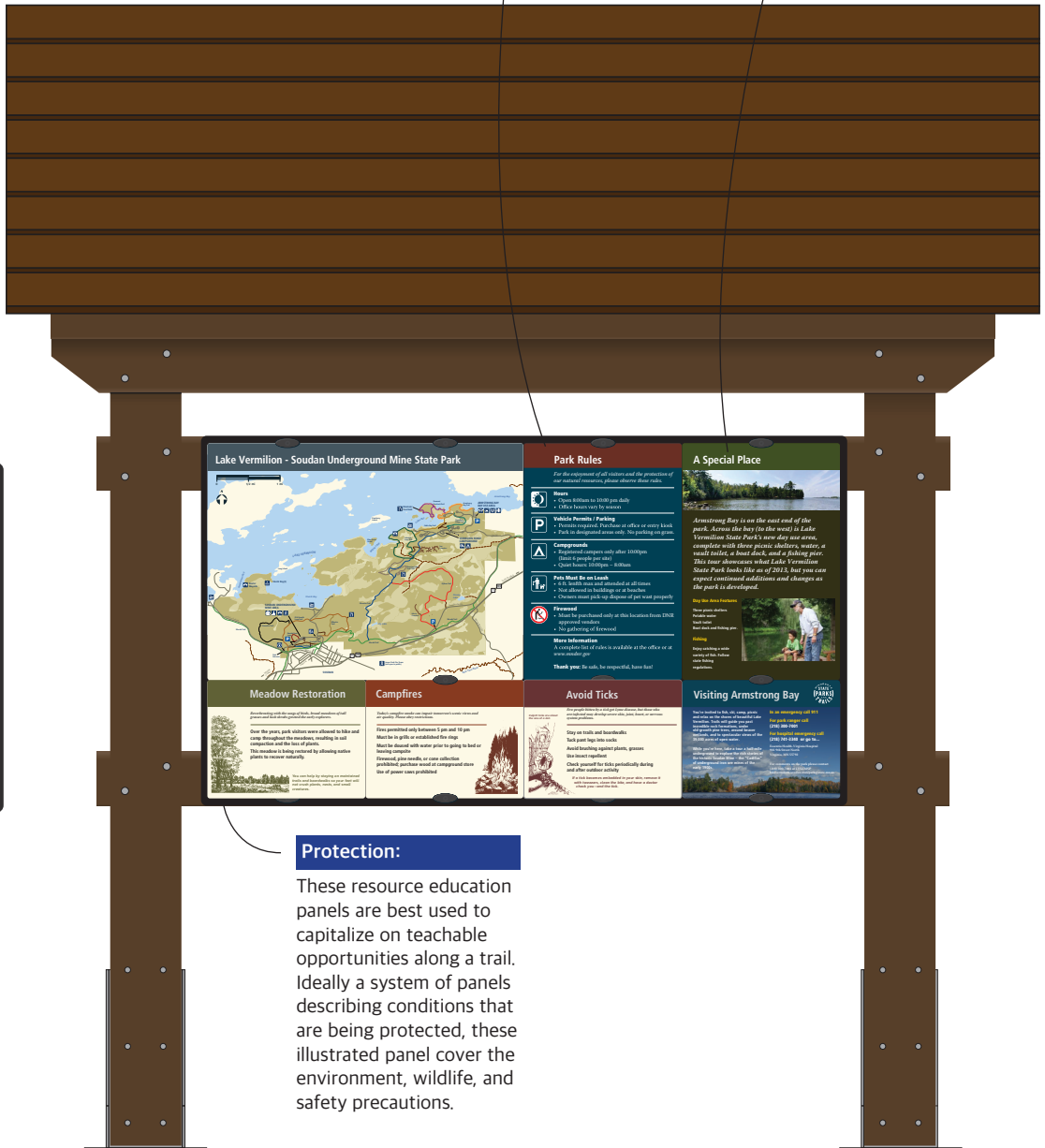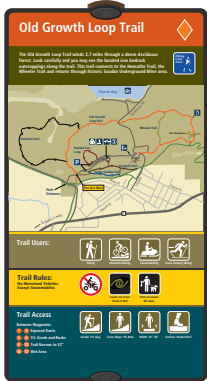
Protection:

These resource education panels are best used to capitalize on teachable opportunities along a trail. Ideally a system of panels describing conditions that are being protected, these illustrated panel cover the environment, wildlife, and safety precautions.

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