



The Trail Signage Notebook, a publication of the Ice Age Trail Alliance, was made possible by a generous grant from:



Introduction

This notebook is in search of daypacks. It is designed to provide volunteers and land managers responsible for portions of the Ice Age National Scenic Trail with a digest of trail signage standards and guidelines. It is intended to be a resource used for signage 'Walk and Talk' assessments and maintenance outings. The notebook outlines various trail marking and signing scenarios with text and pictures and touches on the philosophical contexts within which trail signage decisions are made. Content is based on the Ice Age National Scenic Trail: A Handbook for Trail Design, Construction and Maintenance (available on line at www.nps.gov/iatr/parkmgmt/trail_handbook.htm), extensive statewide field experience, and input from volunteers, agency staff, and hikers.

The Ice Age National Scenic Trail (NST) is a congressionally-authorized component of the National Trails System. The National Park Service (NPS) is the lead agency assigned planning and administrative duties; these duties include determining standards for Trail design, layout, construction, maintenance, AND how the Trail is signed. As a partnership project, the Wisconsin Department of Natural Resources (DNR) Bureau of Parks and Recreation signage standards augment Federal requirements. From the private sector there is a rich and varied history of signage practices to draw upon. The Ice Age Trail Alliance (IATA) is the lead partner responsible for on-the-ground implementation.

Planned to be about 1200 miles long, currently, 500 miles are off road, or "traditional hiking trail", 100 miles are multi-use paths, and 600 miles are connecting roads and sidewalks. The Trail meanders amongst a dizzying array of public and privately-owned lands through diverse landscapes ranging from dense forests studded with 1.8 million-year-old bedrock outcrops to waving tall grass prairies and serene kettle lakes. The Trail engages Main Street USA – 47 communities connect with the Ice Age Trail statewide – and preserves lands for recreation and conservation purposes.

Trail users rely on Trail markings and signs to find their way and understand the areas they travel. Signs inform the general public, neighboring landowners and other recreational user groups of the Ice Age Trail's presence and how they may or may not utilize this public resource. Signage helps focus use and impact on the pathway itself. Trail Signage also educates users by explaining natural and cultural features and points of interests along the way. Of course, signs help regulate and control unwanted activities, too.

In many respects, trail signage is the "Brand Template" by which the public and trail users form perceptions about the Ice Age NST. It should be the "thread of continuity" which remains familiar and constant as the trail traverses its many natural and cultural environments. A casual or first-time trail user in one part of the state should be able to recognize a familiar trail identity when they hike a section of the Trail in any other part of the state. However, achieving this result—well-maintained, properly located signage—takes time, study, effort, and practice. New signage entails walking the same section of trail back and forth, repeatedly, drafting and evaluating blaze locations before committing paint to bark. It entails having knowledge of other trails and recreational modes that interface with the Ice Age NST, observing use patterns and how signage visibility changes over four seasons, and applying thoughtful analysis with roots in aesthetics and psychology.

A significant challenge practitioners face is balancing subjective feelings (that blaze is too far off the trail, is too close to the previous blaze, is not needed, etc.) with established standards and protocol. Juxtapose all of the above with local conditions and with user needs and Trail Signage "balloons" into a complex undertaking indeed! While signs help guide hikers on their journey, they also leave a lasting impression with the public. We want that to be a positive one.

This edition may be revised in the future and we will appreciate your feedback. We look forward to hearing from you regarding what works, what doesn't, and what needs clarification or expansion. Thank you for all you do for the Ice Age NST!!

Tim Malzhan, IATA Director of Field Operations, April 2010.

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Sign Types

Ice Age NST signage consists of two categories: external and internal. External signs identify and inform the public about and how to reach the trail. Internal signs are specific to trail users.

External

- Highway Information Signs
- Highway Warning Signs

Internal

- Trailhead Entrance Signs
- Informational Kiosks
- Regulatory Signs (permitted and non-permitted uses)
- Official Ice Age NST Emblem (Route Confirmation Marker)
- Blazes (Reassurance Markers)
- Arrows (Direction change)
- Road Crossings Signs
- Interpretation Signs
- "Crossing Private Land" Signs
- You-Are-Here Signs
- Destination Signs
- Boundary Markers
- Text Blazes
- Dispersed Camping Area Signs
- Urban Signage
- Temporary and Connector Signs

External Signage

Highway Information Signs

Purpose: To direct motorists to trailheads and parking.

ICE AGE NATIONAL SCENIC TRAIL

- Styles and locations are approved and signs installed by the highway department or agency that controls the road (i.e. Wisconsin DOT, County Highway Department, Town and City Governments).
- Consider using Highway Information Signs only when we are directing the public to major, well-established trailheads that serve established segments of the Trail located on public lands.

Highway Warning Signs

Purpose: Warns motorists that pedestrians may be crossing the road ahead.

What you need to know:

These signs are installed in advance of trail crossings where trail and road conditions warrant. They are especially important when visibility is limited and the speed limit is 45 mph or greater, and when the Trail is located in or near developed facilities.



- Pedestrian Crossing Sign is diamond shaped with black lettering on a yellow background.
- If signs are needed, contact the highway department for concurrence. They may or may not pay for and install these signs.

Internal Trail Signage

Trailhead Entrance Signs

Purpose:

Indicates trailhead entrance locations and available parking. There are "Primary" and "Secondary" location styles.

What you need to know: Primary (metal) Trailhead Signs

- Generally located on major county roads or state highways.
- Location accommodates five or more cars.



2' x 4' "Primary" location style

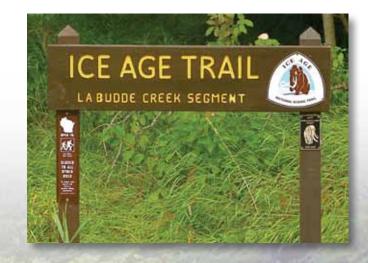
- Install two panels back to back for visibility from both directions.
- Place the sign perpendicular to the highway.
- Use 4x6 treated posts, tapered at the top and stained brown.
 Set the posts at least 36" deep and use two bags of quickcrete per post for stability.
- Locate the sign(s) out of the road right-of-way and near the entrance drive.

- Flag the sign location and call Diggers Hotline to check for underground utilities before digging.
- Signs are either 2 x 4 ft. or 3 ft x 6 ft.
- Optional segment name strip could be mounted underneath the main sign. The lettering & color should match the main sign.
- Trail segment must be certified by the NPS.
- Installation requires managing authority approval on a case-by-case basis.

Secondary (wood routed) Trailhead Signs

- Located on town and county road trailheads where parking for less than five cars is available. Sign is placed parallel to the roadway.
- Sign dimensions are 2" x 12" x 4'.
- "Ice Age Trail" is 4" letters; segment name is 2" letters. Both are painted yellow. Letters are capitalized. Templates to route signs are available from the IATA.
- Use pressure treated lumber stained or painted brown. Rot resistant lumber, such as cedar, may be used. Taper the support post tops as shown above and use appropriate hardware for installation.
- Consider adding a separate post erected several yards further along the trail with the detailed regulatory information to avoid sign clutter.

NOTE: If the trail begins or crosses major roads where no parking is available it is inappropriate to locate a trailhead entrance sign at that location.



Information Kiosk

Purpose:

Presents information about the Ice Age Trail and the specific segment accessible from the trailhead, including maps, permitted uses, landmarks along the trail, volunteer opportunities and activities, interpretive and safety information.

What you need to know:

An Information Kiosk should be installed at trailhead locations within 50 feet of where the trail leaves the parking lot. Size the kiosk to the setting.

- Include information about the specific trail segment and the statewide scope of the Trail, such as the NPS brochure/ map.
- A map should show the Trail as far as the next trailhead in either direction.
- Include seasonal hunting information in State Wildlife Areas.
- Provide local IATA contact information and the Alliance website (www. iceagetrail.org). If the kiosk and/or trail segment is on public land, include a telephone number for the managing authority. It's a good idea to display hospital and sheriff contact numbers as well.
- Utilize weather and vandal-resistant materials to the extent possible; avoid using quickly prepared paper items, except in the case of temporary notices about a trail condition.
- Replace faded display materials and rotate new information into the mix annually. If the kiosk is vandalized make repairs promptly.
- Maintain the structure by removing bugs, debris, wasp nests; address the causes of moisture damage or accumulation as needed.
- Stain or paint kiosks brown and refresh every 3-5 years.
- It is important to factor solar orientation and canopy cover when choosing the kiosk location; avoid open, south-facing exposures if possible. Glass with UV protection helps to prolong the life of display materials.





Regulatory/Usage Control Signs

Purpose:

Show acceptable and unacceptable uses at all access points such as trailheads, road crossings and junctions with other types of trails. This is especially important where problems have occurred.

- These may be plastic 3½" x 3½" or 6" x 6" signs nailed or screwed to wooden posts and/or adhesive decals affixed to Carsonite posts. In some cases, larger format signs are necessary when standard 6" signs are not prominent enough or there are significant illegal use problems.
- On certified segments, regulatory signs are placed below the official trail emblem.
- Emphasis the permitted use, e.g. "Open to Foot Travel". Place prohibited use decals or signs below the official emblem, not above.
- Replace faded signs promptly.
- Posts, not trees, are the preferred support structure to install signs on.



Official Trail Logo (Route Confirmation Marker)

Purpose:

The standard Ice Age National Scenic Trail marker used on segments that have been certified as a component of the National Trails System by the National Park Service.

- The official trail emblem is always placed at the top of posts.
- Use the 3 ½" emblem at access points, road crossings (even drivable forest roads), and intersections with other trails on both sides of all such crossings.
- Use 9" emblems in kiosks, on secondary (wood routed) trailhead entrance signs, at major road intersections, or where more visibility is needed.
- 3 ½" emblems should be installed every ½ to 1 mile if the distance between other uses or road crossings is this long.
- Liberally spread construction adhesive to the back side of the emblem then use aluminum 1½" nails or screws to attach the emblem to treated wooden posts.
- Place a reassurance blaze within about 50 feet of the official Trail emblem.
- Emblems will be supplied by the NPS to the trail segment's managing authority.
- Use the official Trail emblem on certified segments only.
- Metal trail emblems are reflective a welcome attribute in low light or night conditions.







Blazes (Reassurance Markers)

Purpose:

The primary route marker for the Ice Age Trail, blazes reassure hikers they are on the right path between points where the official trail emblem has been placed. Please see "What the Blazes", pages 21-26, for in-depth considerations.

- Blazes are 2"x 6" vertical rectangles.
- Yellow blazes denote the route of the Ice Age NST.
- Factor seasonal variances, such as leaf on/leaf off and if snow cover will obscure the defined tread of the Trail, when determining blaze frequency and location.
- Painted or Plastic blazes are acceptable based on managing authority preference or permission.
 - If nailing into trees is acceptable (on 130 miles of Trail in County Forests and on many state forest



- lands, it isn't) affix plastic blazes with $2\frac{1}{4}$ " aluminum nails. Leave approximately $1\frac{1}{4}$ " gap between the blaze and the tree. Pull the blaze all the way toward you, e.g., away from the tree trunk, to the head of the nail. Use two nails per blaze. Nails should be located about $\frac{3}{4}$ " from the top and about $\frac{3}{4}$ " from the bottom of the blaze.
- If nailing into trees is not acceptable, use painted blazes and posts.
- After an intersection or road crossing place a reassurance marker within 50 feet of the intersection or road.
- Place blazes slightly above eye level, approximately 6' off the ground.
 In areas where the trail receives significant snowfall blazes can be placed slightly higher.
- In non-forested areas, or where blaze location and visibility would be improved, blazes should be placed on 4x4x8 pressure-treated wooden posts or Carsonite posts.
- Blazes should be installed level. Avoid canting blaze orientations to crooked trees, etc.

- Where the trail follows a logging road or other "Troad" (defined as a former vehicular access or extraction route that has been adopted for recreational trail purposes) consider using Carsonite posts w/decal blazes for better visibility and to keep blazes closer to the trail.
- Blue blazes denote a spur or access trail to or from the Ice Age NST.
 - Spur trails lead from the Ice Age NST to points of interest or facilities serving trail users.
 - Access paths lead to the Ice Age NST from a location such as parking areas that are not immediately adjacent to the Trail.
- White is the preferred blaze color for loop trails. Loop trails leave from and later rejoin the Ice Age NST. Colors in addition to white may be used with the exception of orange, which in Wisconsin is closely identified with snowmobile trails.



Painted Blaze



Plastic Blaze



Blaze Decal on Carsonite Post



Loop Trail

Arrows (Directional Change Signs)

Purpose:

These are used in places that require extra alertness -- important turns and confusing locations.

What you need to know:

- Use <u>sparingly</u>. Arrows are NOT necessary at gradual turns or where the trail tread is well-defined.
- Arrows should not be used as "straight ahead" markers or in place of a blaze.
- Arrows are much more effective, e.g. visible, when used in conjunction with a blaze or other appropriate signage.
- Place a reassurance blaze within 50 feet of the arrow.
- On Carsonite posts, use self-adhesive decal arrows.
- The 6" x 6" arrow sign (black arrow on yellow background) is not an approved sign for the Ice Age NST. Rustic wood-routed arrows are acceptable to use in rustic, semi-wilderness settings.







Road Crossing Signage

Purpose:

To alert trail users to upcoming road crossings and where/how the Trail continues across the road. To the extent that these signs may be noticed by motorists, they alert motorists to the presence of the Trail and that trail users may be present.

What you need to know:

Road crossing signs have distinct front-side and back-side characteristics that serve both hikers and the motoring public. Either a treated wooden post or a Carsonite post



is acceptable. The posts should be placed out of the road R/W and be clearly visible from one to the other. Direct crossings are the preferred choice, e.g., posts are straight across from each other.

FRONT SIDE (faces the road; is seen by hikers coming from across the road and may be seen by passing motorists)

- Trail emblem (if a certified segment) is at the top.
- Regulatory/Usage signs are below the Trail emblem
- "Open To" decal may be affixed to a 16" length of brown Carsonite which is then screwed to the pressure treated post works well.
- If the information regarding trail identification and regulatory restrictions is considerable, use two posts to avoid sign clutter.



BACK SIDE (as seen by the hiker approaching the road)

- Plastic blaze (on wooden posts) or decal blaze (on Carsonite post) is on top.
- Road name is identified below the blaze.
 - Use ½" press-on white vinyl lettering on a Carsonite post. On a wooden post screw a 3 inch section of brown Carsonite to the post and affix ½" white vinyl lettering to it. Alternatively, use your computer to make a 3 ½' print; laminate and affix to the post. Note: a folding saw with a sharp blade can be used to easily cut Carsonite posts.





Interpretation Signs

Purpose:

To tell the story of the Ice Age NST and of continental glaciation and human history on the land. There are three basic types of interpretive signage: Identification, Interpretive, and Wayside Exhibits. Interpretation signs should not be installed until an approved plan is in place and stakeholders engaged.

Note: Wayside and Interpretive sign content and style requires advance approval of the NPS.

What you need to know: Identification Signs

- Usually routed wood signs that give the name of a feature (and occasionally dates) along the trail (lakes, landforms, historic sites, flora and fauna).
- Use identification signs for sites listed on destination signs. Stain the boards brown; it is now permissible to paint the routed lettering yellow or blue.



Identification Sign Example

What you need to know: Interpretive Signs

These signs are intended to interest and briefly educate the hiker with limited graphics and descriptions of sites or objects.

- Should be constructed of high-quality, durable material resistant to the natural elements and vandalism; typical size is 15" x 18" to 24" x 36".
- Color should be black lettering on buff background.





What you need to know: Wayside Exhibits

Only significant natural features or cultural resources may warrant a wayside exhibit. They are used to explain historical events or sites, glacial landscapes, plant and animal communities.

• Typically located on public lands.



Wayside Exhibit Sign

"Crossing Private Land" Signs

Purpose:

Alerts hikers when they are entering private property and educates them about proper conduct. Reinforces with the landowner that the Ice Age NST is a responsible guest on their lands.

What you need to know:

 Install on 4x4x8 treated posts at each end of a segment traversing private lands, each sign facing hikers as they approach the private lands.



• Trail maintainers and segment monitors should coordinate with each other and IATA staff to cultivate and maintain an open dialogue with the landowner in order to be aware of and respond quickly to any concerns that may arise.

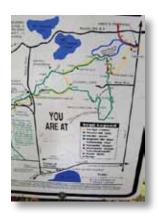
You-are-Here Signs

Purpose:

A map sign used to show where a trail user is in relation to trailheads and parking, road crossings, other trails, landmarks, water, and other services.

What you need to know:

- Sign location and orientation are critical. Any text needs to clearly conform to the map.
- These optional signs are helpful in highly developed, complex or confusing trail networks as well as on remote sections of the trail.



Destination Signs

Purpose:

Used to show distances to various attractions along the trail.

- List the distance to destinations in miles and tenths if appropriate; confirm accurate distances to be shown before making the sign.
- Use 1"letters painted yellow or medium blue for stand-alone signs.
- Typical destination options include distances to towns, water sources, campsites, significant road crossings and other landmarks.



Boundary Marker Signs

Purpose:

Used to mark the boundaries of Trail lands owned by the DNR, IATA and NPS. Placement of these signs must be coordinated with staff.

What you need to know:

- Signs are medium blue decals with white lettering on white Carsonite posts.
 Disclaimer: many IATA properties are marked with brown Carsonite posts.
- Research is required; fence lines are unreliable, plat maps do not provide sufficient information and there is little or no margin for error.
- The standard distance between posts is 200 feet. Topography, vegetation and adjacent land use may modestly increase or decrease this interval.



Text Blazes

Purpose:

Tells users that to hike the Ice Age NST they should follow the yellow blazes. Text Blazes is a pilot program; check with IATA or NPS staff for final policy determinations.

- Prototypes are available in 2"x 6" and 3"x 9" sizes.
- Intended for education not navigation.
- Are not used interchangeably with the official trail logo.
- Only use these signs at the beginning and end of a segment.
- Place in a kiosk, on one leg of a trailhead entrance sign or on the first trail signage post in from the trailhead.



Dispersed Camping Area (DCA) Signs

Purpose:

Tells hikers they have a legal place to camp for the night.

What you need to know:

Dispersed Camping is in "pilot" development. Check with staff for final policy determinations.

DISPERSED CAMPING RULES

- For use by multi-day Ice Age Trail hikers only
- Camp within sight of this sign
- Maximum of six people in this camping area
- One night only
- No fires except for backpacking stoves
- Leave no trace of your visit
- Wash yourself and dishes 200' from water
- Dispose of human and pet waste in 6" cathole if no facility is provided

Compliance with these rules will help ensure the continued existence of camping areas like this one.

Urban Signage

Purpose:

Used to professionally attach the official trail logo, blazes and arrows to a variety of existing posts where the Ice Age NST incorporates sidewalks in towns and cities.

- Permission must be obtained from the local unit of government before attaching signs to posts or otherwise.
- Stop signs or stop sign posts can not be used to attach signage.
- Involve the Department of Public Works from the beginning of the project.
- Use aluminum or stainless steel sign strapping and corresponding applicator tool.





- Done well, Urban Signage helps create a positive "Trail Identity" because hundreds if not thousands of people see it daily.
- Urban settings are difficult to sign because there is tremendous visual competition.
- When new posts need to be installed the post location must be pin flagged, the nearest street address and intersections identified for reference, and Diggers Hotline called to check each post location to be dug for underground utilities.
- Urban signage is expensive to produce; please
 take care to plan this signing in advance
 to ensure that an adequate supply of signs is available, and, to
 strategically locate each sign and not "over sign" (like over-blazing).
- Where appropriate trees are available and it is approved by the managing authority, use painted, blazes on trees in urban settings to minimize sign vandalism.



Purpose:

To mark roads and other non-certifiable routes that constitute, either on a temporary or permanent basis, portions of a continuous Ice Age NST, which is also referred to as "End-to-End Marking".

- "Temporary Connector" signage can be used for a maximum distance of 5 on-road miles between established off-road seaments.
- "Connector" signage is used when the Ice Age NST is expected by TRIAD (NPS, DNR, IATA) partners to be permanently routed on a roadway.
- Both Temporary and (Permanent) Connector signage require advance approval from the TRIAD, various state and local government agencies, and typically, one or more utility companies.
- NPS and/or IATA supplies the signs.
- Contact staff for more information.







What the Blazes!

Yellow blazes are the signage "bread and butter" of the Ice Age NST. Yet, too many blazes is obtrusive and with too few blazes we may lose our way. If you've been lost or seriously 'turned around' while hiking the Ice Age or any other trail, then you probably have a pretty good idea what it is that you really need to see from signage. How about other users' needs? What's the proper balance? How do seasonal changes like snow cover and thick vegetation, tree blow downs that drop blazes face down in the mud, dense fog, slanting rain, and cultural influences like irregular trail maintenance or timber clear cuts, affect trail signage needs for trail users?

The goal when blazing a section of trail is to mark the trail often enough to guide trail users and distinguish the route of the trail, but without adversely affecting the scenic quality of the surroundings of the trail and thus detract from the trail experience.

"Reassurance Markers" is the technical term for blazes. To 'reassure' is to restore confidence. Depending on the trail setting and myriad other factors, it is a reasonable assumption that most Ice Age NST users will welcome a confidence boost that they are on course somewhere between 30 seconds to two minutes from having seen the last blaze or other trail marker. Phrased another way, a rule of thumb is that when a trail user is actively walking and moving forward on the trail, they only need to see a blaze about half the time assuming no sharp turns or intersections with other trails or roads occur.

The longer the distance a blaze is visible, the fewer blazes and signs are needed. Long blaze visibility (sometimes referred to as blaze 'throw') results when optimal blaze locations are chosen. The selection of dark trunk trees close to the trail for blazes, and placing blazes at consistent intervals, are two very important aspects of marking the Trail with blazes. Strive to create a consistent spatial interval between blazes and to maximize long visibility of each blaze.

Selecting Blaze Locations

To select the locations for blazes on a new or rehabilitated segment of trail, teams of two or three are recommended. Start from one end and walk the route out, then back, to gain a sense of existing conditions, natural features and of a hikers pace and rhythm. Assess blaze location options. Compare notes, assemble tools and materials, and then... start over. Work in one direction at a time. One person is a "spotter" and

hangs back 75-200 feet to "sight" blaze locations. Another person holds a yellow plastic blaze where they think a painted blaze should go on a tree; the spotter confirms, or calls for height, angle, or distance adjustments. When the team agrees, the front person lightly tacks the plastic blaze in position with one aluminum nail. Meanwhile, the third person walks ahead and locates the next blaze for the middle person to "spot". Where appropriate trees are not available, locate and mark desired post locations with pin flags. Do this from one road crossing to the next.

Whatever length of time you estimate this process taking, you can safely double it. There will be a lot of give and take and meaningful discussion amongst the trio as you bounce ideas off each other and imagine yourself in other hikers boots. Remember that hikers move at a much different pace then trail maintainers, and factor those hikers who are seeing this section of the Trail for the first time.

Recap:

- Blaze upslope as much as possible and choose live, conspicuous trees close to the trail.
- Select dark trunks 6" or wider in diameter as much as possible.
- Always blaze in one direction at a time.
- Look critically from multiple angles and distances; remember there
 will be seasonal variations and users of all ages and abilities who hike
 the Trail.
- Space blazes well apart and at consistent intervals. As the line 'firms' up, pace distances between blazes to monitor blaze interval and frequency.
- Avoid blazing or nailing signage on picturesque trees.
- It is better to corridor clear and/or improve the trail tread than it is to place more and more blazes or other markers.
- Only one blaze should be visible at most times. About half the time during hiking, no blaze should be visible.
- Use treated wooden posts, stained brown, in open areas and where
 trees of appropriate diameter and proximity to the trail are not
 available. Along wide forest roads or in recently logged areas use
 Carsonite or wooden posts rather than blazing far off the trail or painting
 circles around thumb-size tree trunks.

Painting Blazes

On <u>smooth-bark</u> trees, do not scrape the bark. Level and plumb the draft plastic blaze then draw the 2x6 outline with your "sharpie" marker. Remove the plastic blaze. Paint within the lines using a stipple action. Brush out blotches or runs. Use neutralizing paint to touch up edges and corners as needed.

On <u>rough-bark</u> trees, <u>lightly</u> shave a thin outer layer of bark and create a relatively smooth surface where the blaze will be painted. Go light and don't over do it! With the drawknife or paint scraper start at the top of the draft plastic blaze and lightly scrape about a 2" x 6" area with a sharp bark knife. Swing the draft blaze up and complete the light scraping. Next, swing the blaze down, level and plumb it with the torpedo level. Trace the edges with a sharpie pen or carpenters pencil. Take the plastic blaze off the tree and lightly scrape any areas you might have missed. One of your partners will then paint the actual blaze while you move forward and repeat this procedure at the next location.

Painter: Squeeze a small amount of paint on your 1" brush and with a stipple action fill in the 2×6 outline. Sharp, clean edges with no paint drips is the objective. If needed, use neutralizing paint to sharpen edges or frame the blaze. Apply a second coat of paint to the blaze on your way back through once the first coat has had a couple of hours to dry.

Paint or Plastic Blazes?

Paint is preferred because it is less prone to vandalism, fits wooded settings more naturally, generally lasts longer, and in the long run is easier to maintain.

Drawbacks to paint include the additional time and effort required to do a clean, thoughtful job, and that paint is not forgiving if you later notice better location options.

Plastic is not without its virtues, however. Plastic is quicker to install. It is much more flexible in terms of making location adjustments. Plastic has sharp, linear edges that provide a dimensional look when the blaze is pulled and 'locked' at the head of the aluminum nail. Drawbacks to plastic are that it is more prone to vandalism because nails do get bent sideways and blazes get yanked. Annual tree growth will 'swallow' plastic signage if signage is not maintained. Nails need to pulled back to allow tree growth about every two years; however, it's "hit or miss" whether or not the tree will allow you to do so. Depending on solar orientation and forest canopy cover, plastic maintains its color saturation, or hue, between 3 and 5 years before it needs to be replaced.

Volunteers have experimented with gluing plastic blazes to trees. Results have been mixed. This method is not recommended.

Nail plastic blazes and other signage to treated posts with aluminum nails.

On new sections of trail, it's hard to argue with the idea of starting with plastic blazes then upgrading to paint once we've had a year or two to live with and reevaluate locations. There are segments of Ice Age NST where crews opted to go this route due to lack of time or inclement weather and...those segments still feature plastic blazes.

Removing, e.g., neutralizing, unwanted Painted Blazes

Unnecessary blazes should be "neutralized" and obliterated by lightly scraping loose bark and paint with a paint scraper or drawknife then painting over the unwanted blaze. Do this for trail reroutes, trail closures and as you develop "new eyes" for trail blazing and signage.

When new blazes are added and old blazes are not obliterated this very quickly leads to unsightly blaze "pollution" and confusion. To avoid scenes like the one pictured here, take bark samples to the hardware store to use as a color match. Mix a gallon of arayish-areenish-brownish paint. In the field rub the old blaze with a gloved hand and if needed lightly scrape with a



drawknife – don't over do it. Use the neutralizing mix to paint over the old blaze(s). Apply liberally and brush out any runs. Feather the neutralizing paint vertically and horizontally around the blaze on the tree trunk to naturalize your work. A three inch brush seems to work best for neutralizing old blazes.

Signage Maintenance

Signs are a key indicator of the quality of a trail system. Damaged signs and posts need to be repaired or replaced promptly. Periodic painting or staining will prolong the life of wood signs and posts. Faded blazes and regulatory use signs should be replaced/refreshed as part of an annual trail assessment and maintenance process.

Prune vegetation regularly from the foreground and the background of blazes, trail signage posts and signs. Use a pole saw to prune overhanging branches that drape over and obscure signage. A Cats Paw or Wonder Bar and a 1" x 4" hardwood block helps back out, or pull, nails from trees and posts.

Installing Sign Posts

Install 4"x4"x8" pressure treated posts, which have been stained brown and tops tapered, 36 inches deep. Use a rock tamping bar, posthole digger, and level. Work in pairs and spot locations before digging. Use stone cobble when backfilling to add rigidity. Be especially cognizant of the direction a post is <u>orientated</u> before starting to backfill the hole. A wooden post should be orientated so that two of the four flat planes of the post face trail users; ensure that a flat "face" is actually facing trail users and confirm this from both directions of the trail. When the post face(s) is askew, the visibility of the blazes or signs affixed to the post is greatly reduced.

When post locations are abandoned and the post removed, post holes should be backfilled immediately.

In high use areas and vandalism-prone areas, attach a treated 6 inch long 2"x 4" crosspiece at the bottom of the post to give the local "Hercules" a rough time if they mindlessly decide to try to pull out the post for "kicks."

Mow around trail signage posts as well as the trail itself. When mowing, cut an "eyelash" shape around the post about 8 feet front to back and at least one mower swath wide of the post to keep tall grasses from covering signage.

Signage Tools – The Bucket List

STHIL PS 30 Folding Saw and replacement blade, two or more 1" brushes, quart size zip lock bags, squeeze bottles, yellow and neutralizing paint, drawknife or paint scraper, bastard file, hammer, wonder bar, 1½ inch and 2-1/8 inch aluminum nails, a range of regulatory use signs, small vice grips, rags or shop towels, flagging ribbon. A 5-gallon bucket makes a good carry case. Add a 6" torpedo level, a couple of fresh black permanent marker pens and a carpenters pencil, a utility knife, a small first aid kit and cell phone to call for help if needed, a full water bottle and a sandwich and you're in business.

Trail signage posts should be tapered and stained brown. When installing 4x4x8 trail signage posts, have a posthole digger, a rock/tamping bar, a post level and folding saw with you – don't head for the field without a rock/tamping bar.

Signage Colors

<u>DNR Brown</u> (Signage Posts, Kiosks, Trailhead Entrance Signs)
The closest Pantone match is #469, U or C (<u>U</u>ncoated and <u>C</u>oated).
Acrylic Stain covers well and cleans up easily.

- Ace Rustic Brown = first choice
- Mautz Burnt Bark
- Pittsburgh Manor Brown

Ice Age NST Yellow (Painted Blazes)

Closest Pantone match is "Process Yellow". Uncoated or Coated is ok.

Ice Age Trail Blue (Spur and Access Trails, Destination sign letters) Closest Pantone match is #299; Uncoated or Coated is ok.

Blooper Signage Gallery













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