



DNR Recreation Symbols Extension

Introduction and Requirements

Introduction

The DNR Recreation Symbols Extension offers an easy, efficient method of including standard DNR recreation symbols, such as those used on PRIM maps, in ArcView Layouts and Views. It consists of a panel of buttons representing most DNR recreation symbols. Using this tool, the user can place recreation symbols with leader lines pointing to the specific location of the facility.

Additional features include the ability to change the size and color of the recreation symbols. With this functionality, proper scaling of symbols is straightforward – as simple as scaling any text item in a View or Layout. By default, symbols are drawn black with transparent backgrounds. However, users can select any combination of foreground and background colors available within ArcView.

Requirements

1. **A Windows-based operating system.** This extension is designed to work with ArcView on a machine running Windows 3.1 or higher.
2. **An installed Dialog Designer extension.** For users within the DNR, this will not be a problem – all ArcView stations should have this installed. This is a free extension from ESRI for ArcView 3.0, available on the World Wide Web at <http://www.esri.com>.
3. **A current DNR Recreation Symbol font installed on the computer.** A new copy of this font is bundled with this extension. There have been changes to this font file as of August, 1998. If the computer has an older copy of this font, or it is not installed at all, it will be necessary to install/reinstall the font. For complete instructions, refer to the *Installing the DNR Recreation Symbols Font* section of this document.

About this Document

This documentation takes the user through the basic installation and operation of this extension. Although installation and use of this extension is straightforward, problems may arise on individual systems. Please refer to the Windows documentation for additional information installing fonts.

This document employs some conventions for clear explanation. When an icon appears in the left-hand margin, as the sailboat to the left of this paragraph does, it illustrates the button or icon being discussed in the accompanying text.

User commands and selections are indicated in **bold**, while references to other sections of this document are denoted by *bolditalics*.





DNR Recreation Symbols Extension

Installing the DNR Recreation Font

Symbols are drawn using the DNR Recreation Symbol font. If a font named “DNR Recreation Symbols” does not appear in the font list, the font *must* be installed. To do so,

1. Obtain the file **recreate.ttf** (bundled with this extension)
2. From Windows’ **Start** menu, select **Settings**, then **Control Panel** (see Figure 1).



Figure 1



Fonts

3. Select the **Fonts** icon from the Control Panel.
4. From the toolbar in the **Fonts** folder, select **File**, then **Install New Font**.
5. Select the folder and disk drive where **recreate.ttf** is located. When the directory is selected, **DNR Recreation Symbols (TrueType)** will appear in the list of fonts. Click on it with the mouse and press **OK** (see Figure 2).

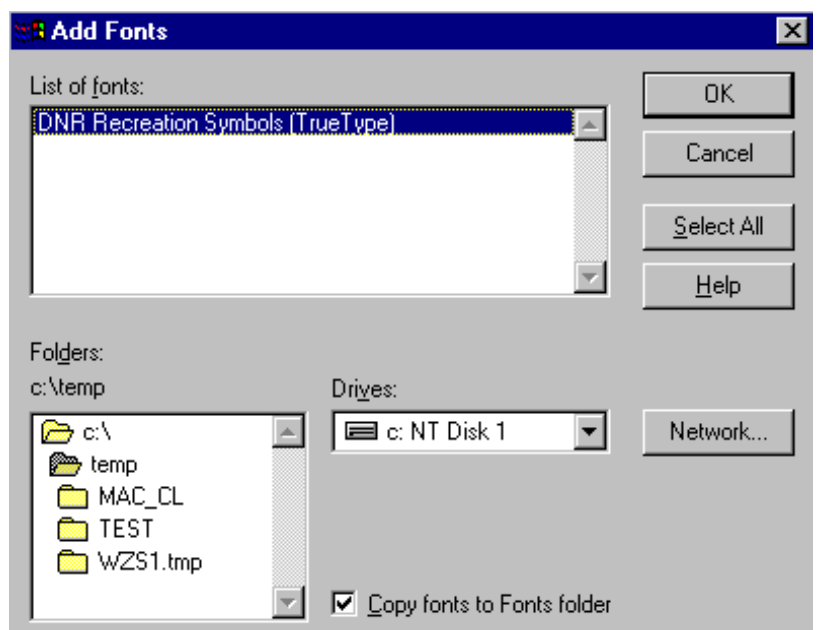


Figure 2



DNR Recreation Symbols Extension

Installing the Extension

To use this extension, it must be installed into the ArcView project. The program is stored centrally in the DNR system, so this will be straightforward within the DNR computer network.

To install, select **File**, then **Extensions** (Figure 3) from ArcView's menu bar. A pop-up window will appear with a list of available extensions. To select DNR Recreation Symbols, scroll to locate it on the selection bar, then click on the box next to the **DNR Recreation Symbols** (Figure 4).

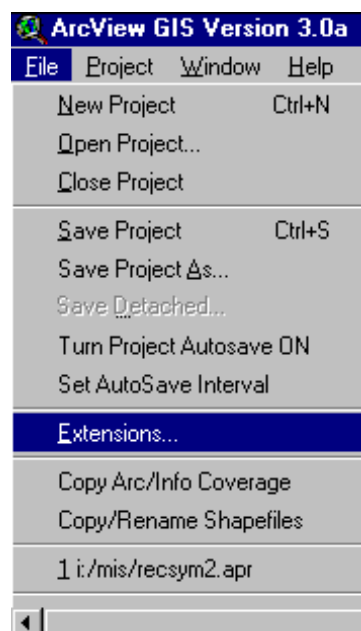


Figure 3

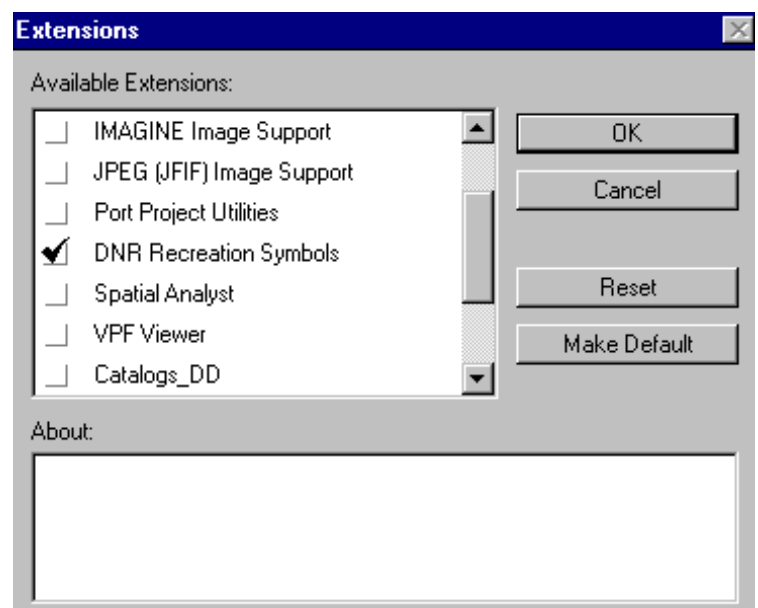


Figure 4

If this extension is being used outside the DNR network, please refer to ESRI's documentation for more information on loading extensions.



Once the extension is loaded, a sailboat icon appears on both the View and Layout button bars. The button is located on the far right of the bar, next to the help button.




DNR Recreation Symbols Extension

Running the Extension



Running the program

Running this extension is easy. Simply click on the sailboat button. An panel containing all available recreation symbols will pop up (Figure 5). To close this window, select the  button in the upper right-hand corner of the panel. Closing this window does *not* close the extension. Additional symbols can be placed at any time by re-selecting the sailboat button from the View or Layout toolbar.

There are two types of buttons : **symbols** and **appearance**.

Symbols are grouped into five categories:

1. Help and Interpretation
2. Facilities and Landmarks
3. Camping and Lodging
4. Hunting, Fishing, and Water Recreation
5. Sporting and Other Recreation

Please refer to the *Symbol Definitions* section for details on what each symbol represents.

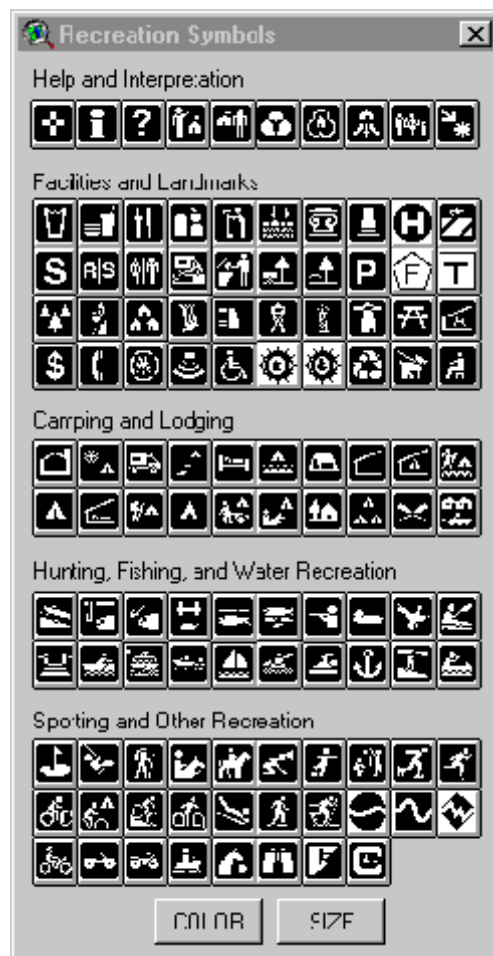
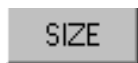


Figure 5

There are two **Appearance** icons, **color** and **size**.



Changes symbol background and foreground colors. See **Changing Icon Color and Size** for more information.



Changes the size of the font. See **Changing Icon Color and Size** and **A Word about Text Scaling** for more information.

Placing Icons



1. Select the desired symbol from the icon panel.
2. To draw a symbol with a leader line, drag the pointer from the point of the feature to the desired icon location. Click once to place a symbol without a leader line.
3. To stop placing recreation symbols, either close the Recreation Symbol panel or select a tool (e.g. the pointer or magnification buttons) from the button bar.



DNR Recreation Symbols Extension

Changing Icon Color and Size



COLOR

Changing Icon Color

1. If not already opened, open the Recreation Symbols panel by selecting the **sailboat** icon.
2. Select **Color** from the Recreation Symbol panel.
3. ArcView's Color Palette (Figure 6) will pop up. To change the color of the icon, select **Foreground** from the pull-down menu, then select the desired foreground color. To alter the background color, select **Background** and select the color of interest.
4. The background color is the button's face (default is transparent), while foreground is the rest of the symbol (default is black). For example, selecting a red foreground and a purple background will produce the following symbol. (For non-color copies of this document, the purple background is the light-colored area, the red foreground the dark area).

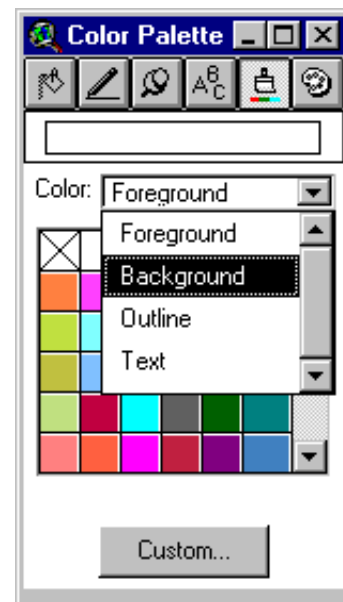


Figure 6



SIZE

Changing Symbol Size

1. If not already opened, open the Recreation Symbols panel by selecting the **sailboat** icon.
2. Select **Size** from the Recreation Symbol panel.
3. ArcView's Font Palette will pop up. The point size determines the size of the recreation *symbol*, not the entire size of the *graphic*. That is, the result of the selection being made in Figure 7 will be symbols of 18 point connected to leader lines of variable length. Since DNR Recreation Symbols are stored in a font, size is determined by points. For more information about text scaling, please read *A Word about Text Scaling*, below.

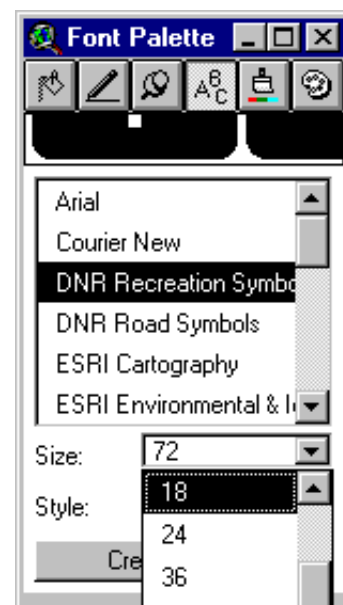


Figure 7

A Word about Text Scaling

Symbol size is specified in points (72 per inch) and scaled to a particular map scale. Thus, if you are printing a map at 1:24,000 scale and you want the symbols to be 1/10 of an inch, you would set the font size to 7.2 (72/10) at 1:24,000 scale.



DNR Recreation Symbols Extension

Symbol Definitions

Help and Interpretation

<i>First Aid</i>	<i>Travel Information Center</i>	<i>Information</i>	<i>DNR Office</i>	<i>Ranger Station</i>	<i>Interpretive Center</i>	<i>Interpretive/Trail Center</i>	<i>Trail Center</i>	<i>Visitor Center</i>	<i>Point of Interest</i>

Facilities and Landmarks - First Two Rows

<i>Drinking Water</i>	<i>Snack Bar</i>	<i>Food Service</i>	<i>Grocery Store</i>	<i>Overlook</i>	<i>Geologic Marker</i>	<i>Museum</i>	<i>Historic Site</i>	<i>Historic Marker</i>	<i>Gift Shop</i>
<i>Shower Building</i>	<i>Restrooms/Showers</i>	<i>Restrooms</i>	<i>Trailer Sanitation System</i>	<i>Dumpster</i>	<i>Wayside Park (with facilities)</i>	<i>Wayside Park (limited facilities)</i>	<i>Parking</i>	<i>Fire Wood</i>	<i>Pit Toilet</i>



DNR Recreation Symbols Extension

Symbol Definitions

Facilities and Landmarks - Second Two Rows

<i>Forest Nursery</i>	<i>Scientific and Natural Area</i>	<i>Group Center</i>	<i>Waterfall</i>	<i>Dam</i>	<i>Fire tower</i>	<i>Observation Tower</i>	<i>Lighthouse</i>	<i>Picnic Area</i>	<i>Picnic Shelter</i>
<i>Rentals</i>	<i>Pay Phone</i>	<i>Council Ring</i>	<i>Amphitheatre</i>	<i>Handicapped Accessible</i>	<i>Minnesota River Route</i>	<i>US River Route</i>	<i>Recycling Station</i>	<i>Pets on Leash</i>	<i>Rest Stop</i>

Camping and Lodging

<i>Lodge</i>	<i>Winter Camping</i>	<i>Vehicle Campground</i>	<i>Walk-in Campground</i>	<i>Lodging</i>	<i>Watercraft Camping</i>	<i>Tent Campground</i>	<i>Shelter</i>	<i>Shelter/Campsite</i>	<i>Water and Backpack Camping</i>
<i>Campsite</i>	<i>Sleeping Shelter</i>	<i>Camping</i>	<i>Backpack Camping</i>	<i>Car-in Campground</i>	<i>Equestrian Camping</i>	<i>C</i>	<i>Primitive Group Camp</i>	<i>Outfitter</i>	<i>Resort</i>



DNR Recreation Symbols Extension

Symbol Definitions

Hunting, Fishing, and Water Recreation




















<i>Boat Ramp</i>	<i>Ice Fishing</i>	<i>Fishing</i>	<i>Fishing Pier</i>	<i>Fish Cleaning Shelter</i>	<i>Fish Hatchery</i>	<i>Hunting</i>	<i>Waterfowl Protection Area</i>	<i>Wildlife Management Area</i>	<i>River Kayaking</i>
<i>Dock</i>	<i>Row Boating</i>	<i>Tour Boat</i>	<i>Motor Boating</i>	<i>Sailing</i>	<i>Sea Kayaking</i>	<i>Swimming</i>	<i>Marina</i>	<i>Carry-in Access</i>	<i>Canoeing</i>











DNR Recreation Symbols Extension

Symbol Definitions

Sporting and Other Recreation - First Two Rows

<i>Golf Course</i>	<i>Playground</i>	<i>Hiking</i>	<i>Equestrian Area</i>	<i>Horseback</i>	<i>Spehtraking</i>	<i>Athletic Fields</i>	<i>Volleyball Courts</i>	<i>Ice Skating Rink</i>	<i>In-Line Skating</i>
									
<i>Bicycling</i>	<i>Bicycle Touring Camp</i>	<i>Mountain Biking</i>	<i>Bicycle Rental</i>	<i>Sledding</i>	<i>Snowshoeing</i>	<i>Cross-Country Skiing</i>	<i>Ski Slope - Easy</i>	<i>Ski Slope - Intermediate</i>	<i>Ski Slope - Difficult</i>
									

Sporting and Other Recreation - Third Row

<i>Dirt Biking</i>	<i>4 x 4</i>	<i>All-Terrain Vehicle</i>	<i>Snowmobiling</i>	<i>Polo Fields</i>	<i>Nature Observation</i>	<i>Museum</i>	<i>County Recreation Area</i>
							



DNR Recreation Symbols Extension

Closing the Extension/Bug Report

Turning off the Extension

To remove the extension from the project, select **File**, then **Extensions** from ArcView's menu bar. Find the extension entitled **DNR Recreation Symbols**, and click on the black check mark to the left (in Figure 8, the extension is ON). Click **OK**. The sailboat buttons will be removed from the View and Layout toolbars, and the Recreation Symbols panel will no longer be available for use. However, any symbols placed will remain in the View or Layout – turning off the extension does not remove them.

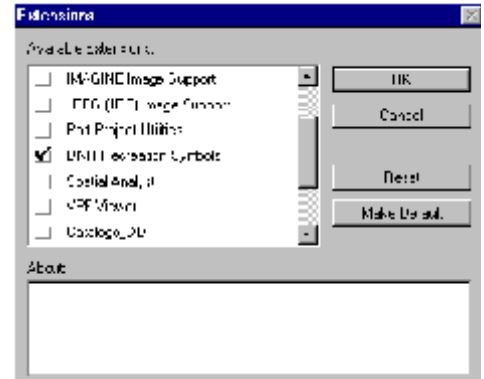


Figure 8

Known Deficiencies and Bugs

Below are the known deficiencies of this extension. To report a new bug, contact Tim Loesch, e mail tim.loesch@dnr.state.mn.us.

- 1) The extension does not function on the UNIX version of ArcView. This is likely do to ArcView's handling of the DNR-created Recreation Symbol font.
- 2) Two symbols do not allow the background option: Fire Wood and Pit Toilet.

