

4-1-6 Extent

This menu allows you to set the size at which data will be displayed. It is effective in all themes.

(1) Selected Extent

This allows you to view all selected features in an active theme. The number of items selected does not matter.

(2) 500 Meters

When only one item is selected, an area of approximately 500m² around that item is displayed.

(3) 1,000 meters

When only one item is selected, an area of approximately 1,000m² around that item is displayed.

(4) 2,000 meters

When only one item is selected, an area of approximately 2,000m² around that item is displayed.

(5) 3,000 meters

When only one item is selected, an area of approximately 3,000m² around that item is displayed.

4-1-7 Display

(1) Full Screen

This function maximizes the size of the ArcView application window or the currently displayed view. The maximum size is determined by the resolution of the screen as detected by the application the first time it was started up on the particular system you are using. Although 1,024 x 768 pixels is the fully supported resolution size, the application can also be operated on screens with a resolution of 800 x 600 pixels and 1,280 x 1,024 pixels. Even if a larger screen has been connected to the computer you are using since the application was installed, unless the resolution is changed in the "defenv.env" file, the full screen function will only display views at the screen size originally detected by the application when it was installed. You can determine the resolution of the screen you are using by pressing the "Shift" and "Delete" keys together. Input this information into the "defenv.env" file and then select "Full Screen" to display items at the new screen size. The block name for this item in the "defenv.env" file is [DISPLAY].

(2) Label Theme ON

This function displays all label themes. Display selection for individual themes can be carried out by checking the check box to the left of the theme name.

As the label theme has a threshold that automatically turns the display area on and off, there may be times when things may not be displayed even though they are turned on in the display area. For information regarding setting the threshold please refer to "Threshold" in the "Administrator" submenu of the "Option" menu. Before changing such settings you should, of course, check with your system administrator.

(3) Label Theme OFF

This function prevents all label themes from being displayed. Display selection for individual themes can be carried out by checking the check box to the left of the theme name.

(4) Redraw Display

This function redraws the presently displayed view. There are

times when parts of an image are not redrawn completely when carrying out certain operations or when parts of previous operations are left showing on the screen. Selecting the Redraw Display function causes the whole view to be completely redrawn.

(5) Reset TOC Width

This function resets the width of the TOC (Table of Contents) to its original settings. With this application, appropriate thresholds are set for each theme which control the display of that particular theme.

When you want to completely display all areas of the legend, when the size of the view has been changed, or when you want to temporarily change the width of the TOC because the size of the view has been changed, it is OK to change the width of the TOC. If the width of the TOC remains at the new settings, the threshold for the view may no longer function correctly. This is because the view is reduced by changing the width of the TOC without enlarging or reducing views. If the width of the TOC is temporarily changed, selecting the "Reset TOC Width" function will return all TOC settings to their original values.

4-1-8 Calculate

This menu allows you to calculate the area of mangrove sub-compartment.

(1) Total Area Selected

This function allows you to calculate the total land area of the mangrove sub-compartment selected. When no mangrove sub-compartment are selected, the error message shown in Figure 4-27 will be displayed.

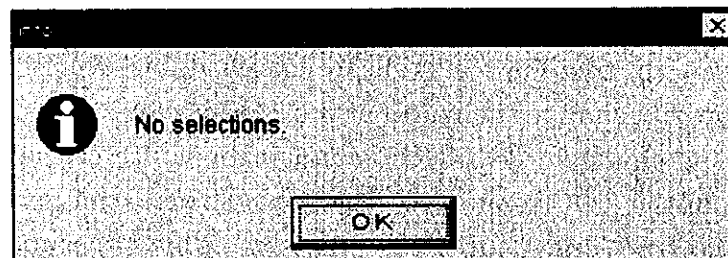


Figure 4-27 This error message is displayed when you try to calculate the total area of mangroves when no mangrove sub-compartment has been selected.

(2) Recalculate Area

This function is used to calculate the area of the features selected in the active polygon theme and to input the total in the Area field. The area is calculated in accordance with the unit of measurement designated in the "Map Unit" setting in the View Properties window. This is then converted to hectares and input into the Area field. The accuracy of these calculations is affected by the projection method designated in the view settings. When polygons have been edited using the Feature tool, although the area is automatically recalculated, if this menu is used the area is recalculated even when editing of polygons is not being carried out. When no feature is selected, a message will be displayed to check whether or not you want all records recalculated.

4-1-9 Document

This menu allows you to manipulate your data.

(1) Layout

Select "Layout" from the "Document" menu to choose the layout you want to use as shown in Figure 4-28.

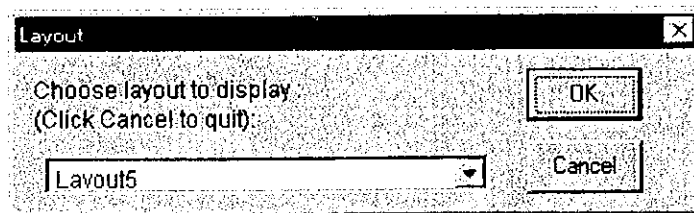


Figure 4-28 This is where you choose the layout you want to work with.

You can print the layout window. It is possible to freely make changes to direction information, scale bars, and titles, etc. It is also possible to save layouts to which you have made changes.

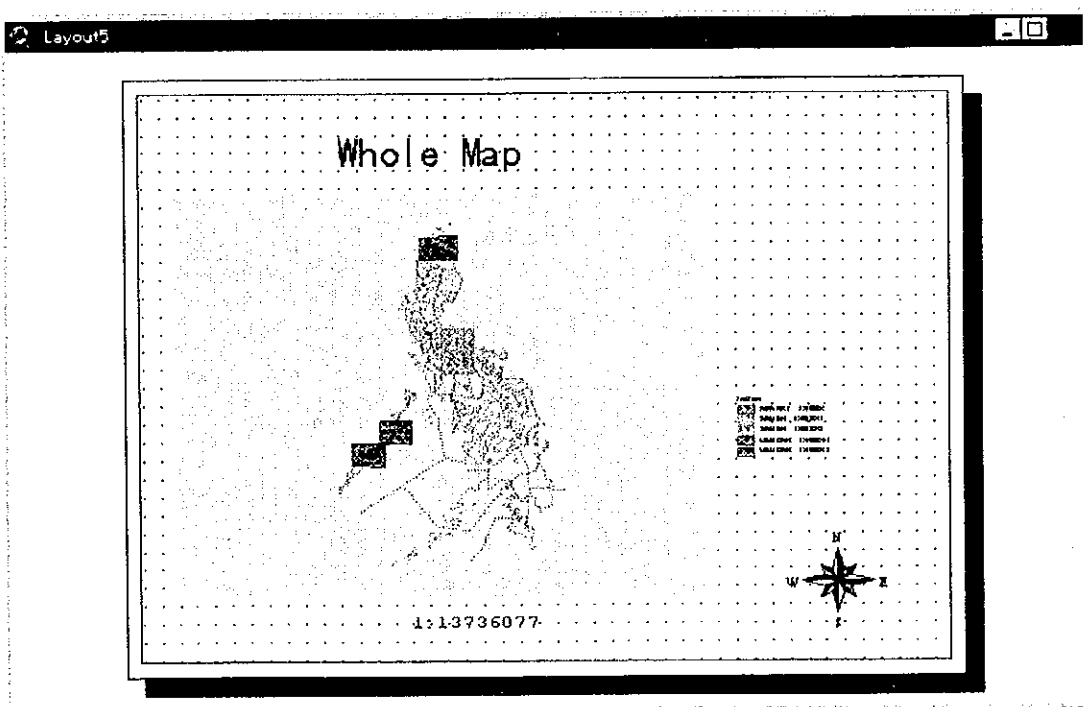


Figure 4-29 An example of a layout window.

(2) Print

This function is used to print views. When a printer has not been installed, if it has not been turned on, or if it cannot be found on the network (for networked computers), the error message in Figure 4-30 will be displayed.

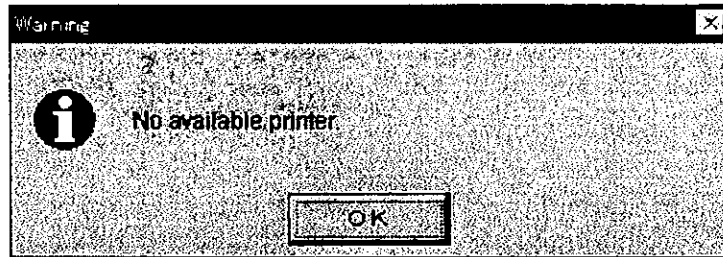


Figure 4-30 When there is no available printer this error message will be displayed.

(3) Open

All views are listed in the View Select window. Select the view you want to change views.

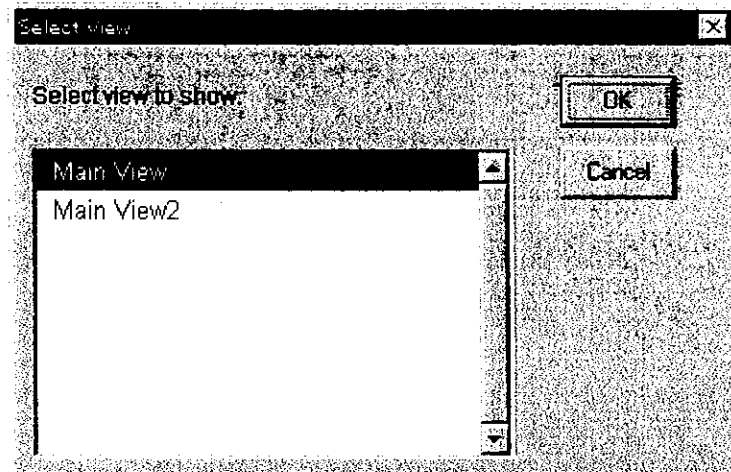


Figure 4-31 The View Select window.

(4) Copy

This function is used when you want to make a hard copy of the view presently displayed. A dialog box will be displayed for you to enter the name before the copy is saved. You must, of course, use a different name for the copy unless you are copying to a different location.

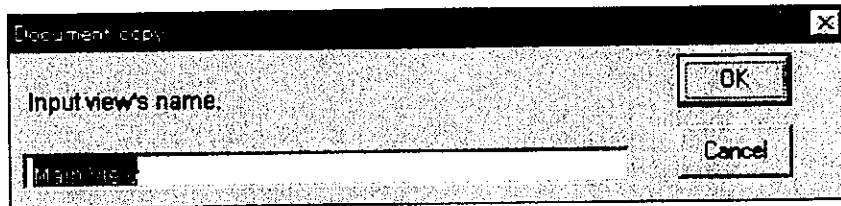


Figure 4-32 This dialog box will be displayed asking for the name of the new copy before it is saved.

The extent, search state, and legend settings of the present view will be saved exactly as they are in the new file. After saving the copy you can open it by selecting "Open" from the "Document" menu. Even though changes may be made to the search settings of the original view, the search state of the copy will remain unchanged. As the copy can be used in exactly the same way as any other search view, it is easy to accidentally make changes to the display state. Also remember that the more views you save in the project, the longer it will take for the application to start up.

(5) Edit

This function is used to edit designated themes. Once you have entered edit mode, this menu option will no longer be available until you quit edit mode. The "Stop Edit" menu option will, of course, become available. Select the theme you want to edit from the list box in the Edit Theme Selection window.

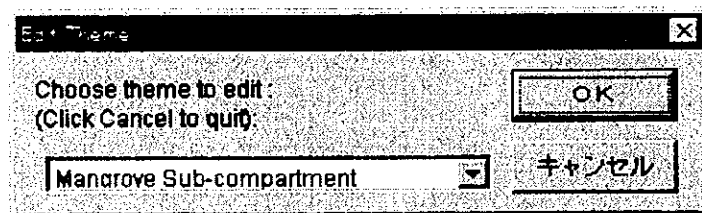


Figure 4-33 The Edit Theme Selection window where you select the theme you want to edit.

If you select the Mangrove Theme as the theme to edit, the feature tool will start up automatically. If another theme is selected, a dotted line will appear around the check box located to the left of the theme name in the main view as shown in Figure 4-34.

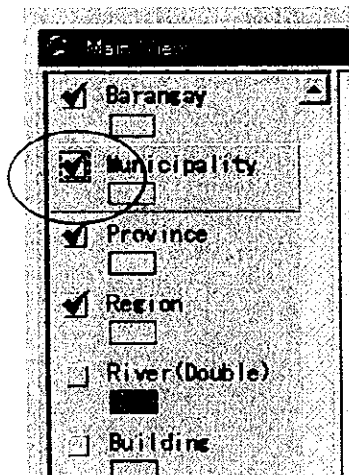


Figure 4-34 The dotted line around the check box located to the left of the Mangrove theme indicates that this theme is in Edit Mode.

After entering Edit Mode it is possible to make changes to features by using ArcView's standard editing tools.

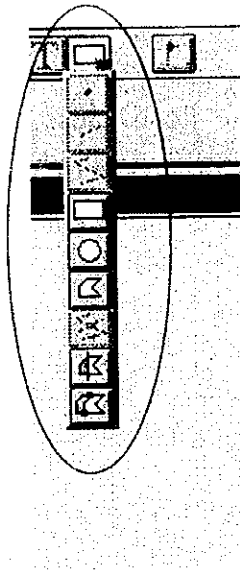


Figure 4-35 This is the Edit Tool button.

The tools available for editing will vary according to the shape of the theme you are editing.

(6) Stop Editing

This function is used to exit Edit Mode. Once you enter Edit Mode you are confined to working on one particular theme and can not edit other themes until you exit the theme you are currently editing. Once you exit Edit Mode, unless another theme is selected this menu is not available.

(7) Delete

This function is used to delete COPIES OF VIEWS. If any views are available to be deleted they will be listed in the delete window. You can not delete original views. If you delete the view you are presently using, the originally used view will be opened and take its place.

4-1-10 Legend

This menu allows you to make changes to legends.

Although all legends can be customized using ArcView's Legend Editor, when legends are classified by class, etc., it is impossible to change the fill palette of all legends at the same time. This function has a selection of typical fill patterns and allows you to make changes to the fill patterns of legends in one simple operation. As all of the fill patterns provided here are display styles, it is possible to combine these with color selections. It is not possible to make changes to colors designated by changing such legend patterns.

(1) Solid

This function allows you to designate basic fill patterns by color for legends. The color of fill patterns can be designated by using the Legend Editor. Double-click on part of the legend to display the Legend Editor.

(2) Hatch

This function allows you to apply a single hatch to a legend. Although the angle can be set freely, the angle you choose will determine how clear your legend will look.

(3) Cross Hatch

This function allows you to apply a cross hatch to a legend. Although the angle can be set freely, the angle you choose will determine how clear your legend will look.

(4) Empty

For polygons where the fill color chosen is transparent, only the borders will be shown.

(5) White

For polygons where the fill color chosen is white, they will appear completely blank.

(6) Legend On/Off

This function determines whether or not an active legend will be displayed. If you decide not to display a theme's legend, the legend

area of the theme will be hidden. This means that other themes move up and you are able to display more than one theme name at once as shown in Figure 4-36.

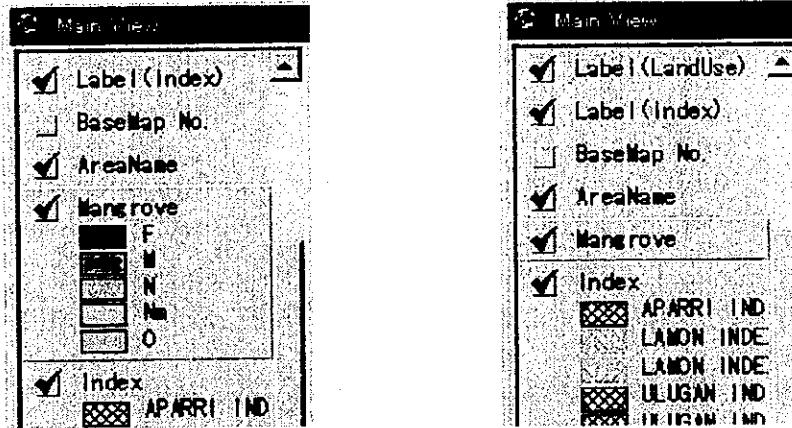


Figure 4-36 The diagram on the left shows the mangrove legend is displayed while the diagram on the right shows how it looks when it is not displayed.

4-1-11 Option

Although this is a tool which is not commonly used by users of MAFRIMS it is a necessary function for high level use.

(1) Show Symbol Window

This function displays ArcView's Symbol Window.

(2) Printer

This function is used for selecting printers. The information displayed in this window depends on the type of printer currently selected. If a printer has not been installed, or if there is no printer available, the error message shown in Figure 4-37 will be displayed.

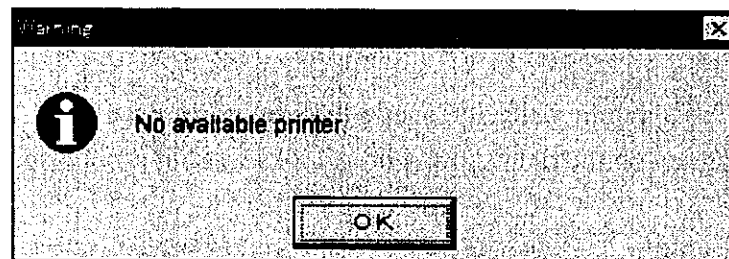


Figure 4-37 This error message will be displayed when no printer is available.

(3) Show ArcView Menu

This function is used to display ArcView's original menu as shown in Figure 4-38. ArcView's original menu is not displayed when the application is started up.



Figure 4-38. ArcView's original menu.

(4) Custom Menu

This function hides ArcView's original menu if it is displayed and restores the menus displayed when the application was started up.

(5) Administrator

This submenu provides administrators with the following functions.

a. Threshold OFF

This function allows the administrator to invalidate the threshold values set in each theme. If this function is active, then all themes will be displayed regardless of their thresholds.

b. Threshold SET

This function sets threshold values for each theme. The threshold values set are recorded in the "Threshol.txt" file. When you want to change the threshold values of a theme, please make changes to this file. If you only want to make temporary changes to a theme, make changes to the theme property. Values set by theme properties will all return to normal when the Threshold SET function is used.

c. View Report

This function creates a report about all themes in the presently displayed view. This includes the source file names of files referred to by the theme and the theme threshold values.

d. Set Alias

This function allows you to make an alias of a theme. By using the "Set Alias" function the Theme Selection window is displayed. Click on the theme for which you want to make an alias.

e. Add Photo

Use this function to add camera symbols to maps. Selecting this function makes the photo theme active and turns on the Camera Symbol Addition tool, making it possible to immediately select a point to insert a new camera symbol. When you have selected the point to insert the new photo, click on it once to set the location and then drag with the mouse to indicate the angle from which the photo was taken as shown in Figure 4-39.

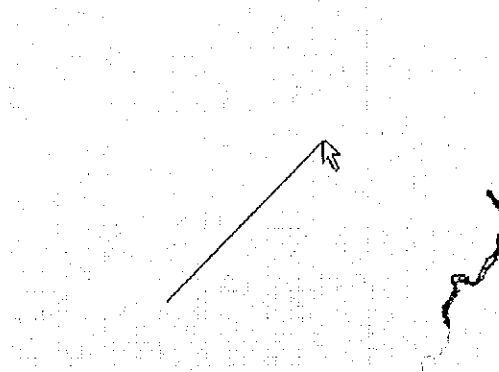


Figure 4-39 Click on a point to insert the photo and then drag with the mouse to set the camera angle.

After you have finished positioning the mouse, double-click to bring up the angle verification dialog box as shown in Figure 4-40. If the angle is correct then click "Yes."

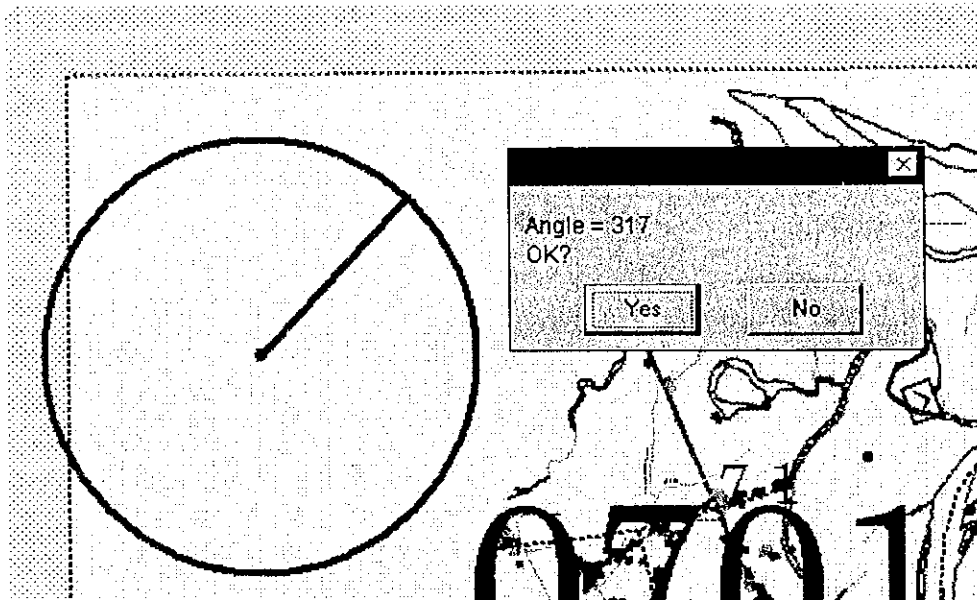


Figure 4-40 Double-click to bring up the angle verification dialog box.

If you want to reset the angle then click "No" in the angle verification dialog box and you will then be able to set the angle again.

Don't worry if you have trouble determining the angle here as you can change the photo angle later by inputting numerical values in the angle box in the attribute window. If you click "Yes" then the Attribute Setting Window will be displayed. Input other necessary

data in the attribute window and make corrections to the angle if required. You can select additional points even with the attribute window. The attribute window will be displayed each time you insert a photo.

f. Theme Report

Use this function to create a report on the DBF file of the active theme.

Any name can be used for the name of the theme report.

g. Initialize Mangrove Theme

Use this function to add fields and data to thematic maps for mangrove sub-compartment newly added to the system.

(6) Define Window Size

The screen resolution supported by the application is 1,024 x 768 pixels. Although it is not desirable for the screen resolution to be changed to anything other than this, this function is used to avoid any problems which may occur when changes have been made to window resolution. If the resolution is changed while ArcView is starting up, ArcView recognizes the startup resolution as the present resolution and no problems will occur initially. However, the next time ArcView is started up, the ArcView window may be located in a negative position making it impossible to see the Title Bar, which makes it impossible to use the menus. When such a problem occurs, if you press the "Shift" and "Delete" keys together, the current resolution is acquired by the system and written to the "defenv.env" file and the window is repositioned correctly for that particular resolution.

(7) Version

This function is used to show version data for the application.



Zoom out Button

Use this button to reduce the view.



Save Project Button

Use this button to save any changes you have made to the project.



Theme Properties Button

Use this button to display the properties of the active theme.



Edit Legend Button

Use this button to display the Legend Editor of the active theme. The Legend Editor can also be displayed by double-clicking on the window.



Open Theme Table Button

Use this button to display the tables of active themes.



Query Builder Button

Click this button to search in the tables of a theme.



Zoom to Selected Features Button

Click this button to display the selected extent of active themes in a view.



Zoom to Previous Extent Button

Click this button to display the previously selected extent. When it is not possible to display the previous extent, this button will appear gray and can not be selected.



Select none Button

This button deselects the active theme.

4-3 Tool Buttons

The Tool Bar allows you to select functions quickly without accessing the Menu Bar and searching for them. For example, when enlarging a designated location in a view, clicking on a single button is much easier than accessing ArcView's complex menus. When a tool is selected, it stays selected until another tool is selected. In some case the shape of the cursor changes when a particular tool is selected. Positioning the cursor over a tool without clicking on it shows you information regarding that particular tool.

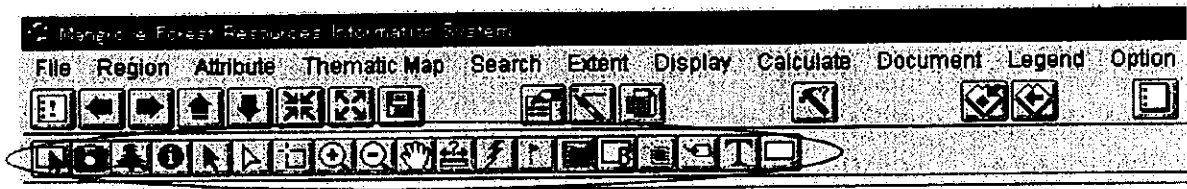


Figure 4-42 The Tool Bar.

The function of the various tools buttons in the tool bar is explained below.



Index Map Selection Tool

This tool is activated when the application is launched. When this tool is active the cursor changes to a hand. Clicking inside an index map causes the map to flash and then the index map is displayed.



Figure 4-43 This shows the cursor positioned over an index map.

When the active theme is an index map, if you click the view with the right-hand button of the mouse, a pop-up menu will be displayed. Select "Whole" from this menu as shown in Figure 4-44 to return simply to the map of the entire area.

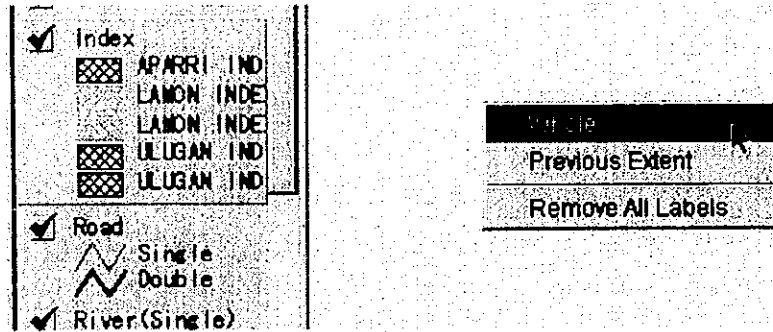


Figure 4-44 This shows the pop-up menu displayed by clicking on the view with the right-hand button of the mouse.



Photo Selection Tool

When this tool is active the cursor will change to a crosshair. When you want to display a photo, click on a particular camera symbol and the photo will be displayed in the top left of the view. You can also select photos by dragging a box over a certain area to select all the photos in that area. The results of the search will be displayed in a list from which you can make your selection.

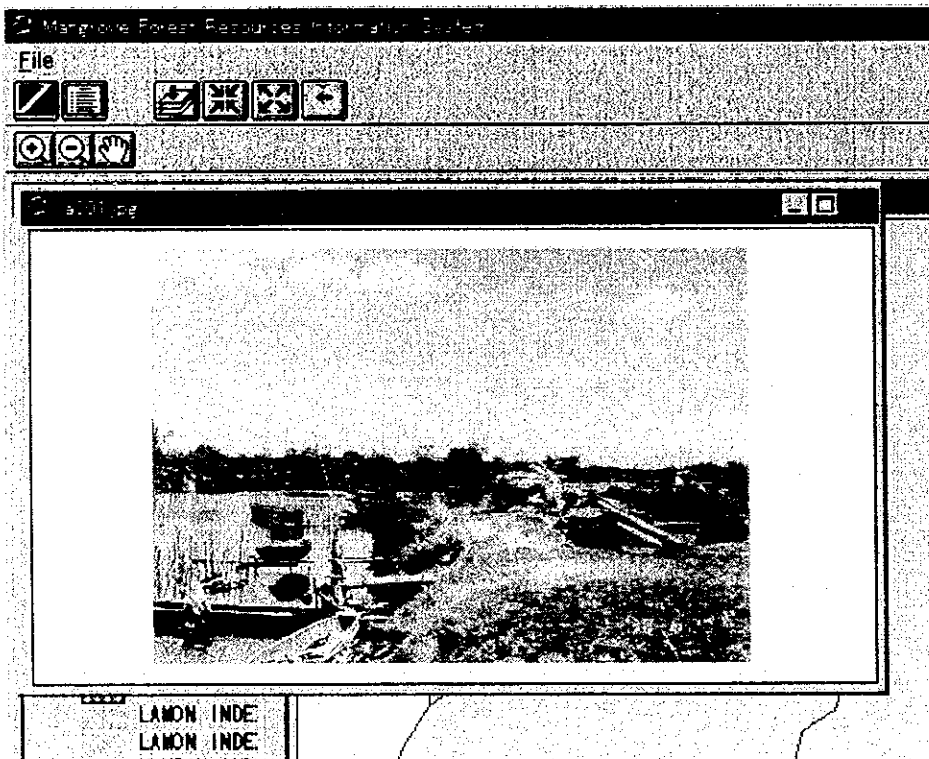


Figure 4-45 This shows a photo displayed in the top left of the view.

The buttons and tools shown when a photo is displayed operate in the same way as when they are used in the view window. Clicking on the button with the white diagonal line on the red background shown in Figure 4-46 causes displayed photos to be closed.

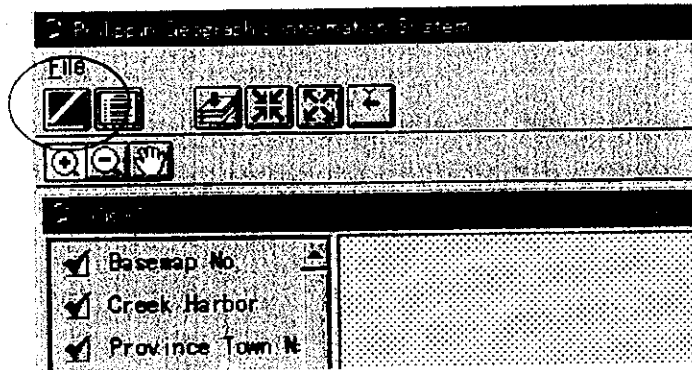


Figure 4-46 Clicking on this button closes photos.

You can also close photos by clicking the right-hand button of the mouse on the photo to display a pop-up menu as shown in Figure 4-47. Choose "Close" from the menu to close the photo window.

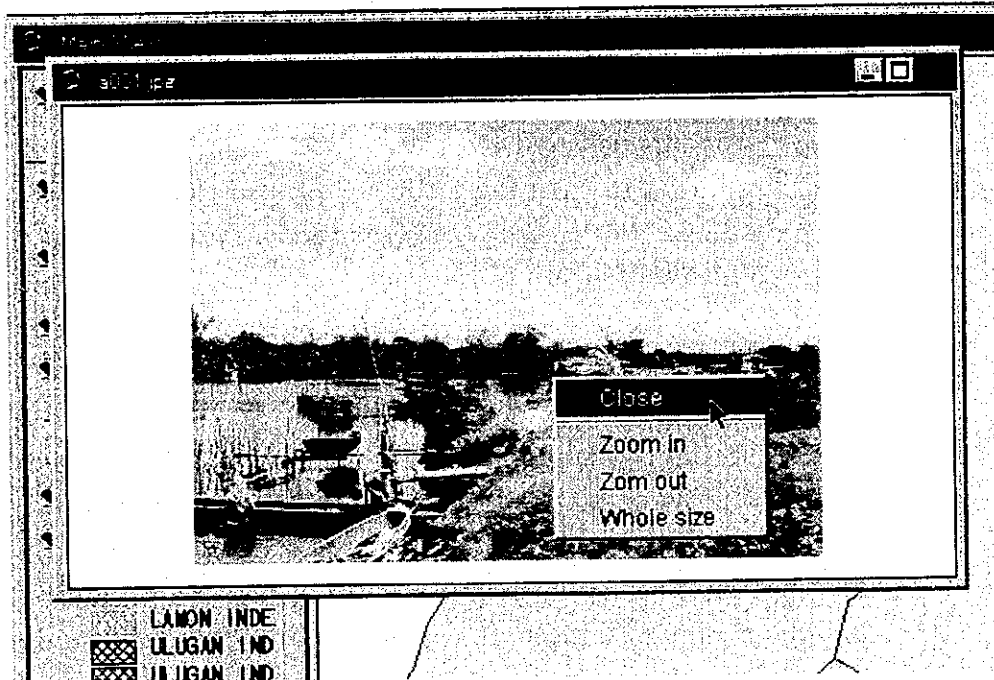


Figure 4-47 Clicking the right-hand button of the mouse on the photo will display a pop-up menu. Choose "Close" from the pop-up menu to close the photo window.

When you are carrying out a search for a photo by dragging a box over a particular area on the map and more than one camera symbol is selected, then they are listed in the selection window shown in Figure 4-48 together with their attributes.

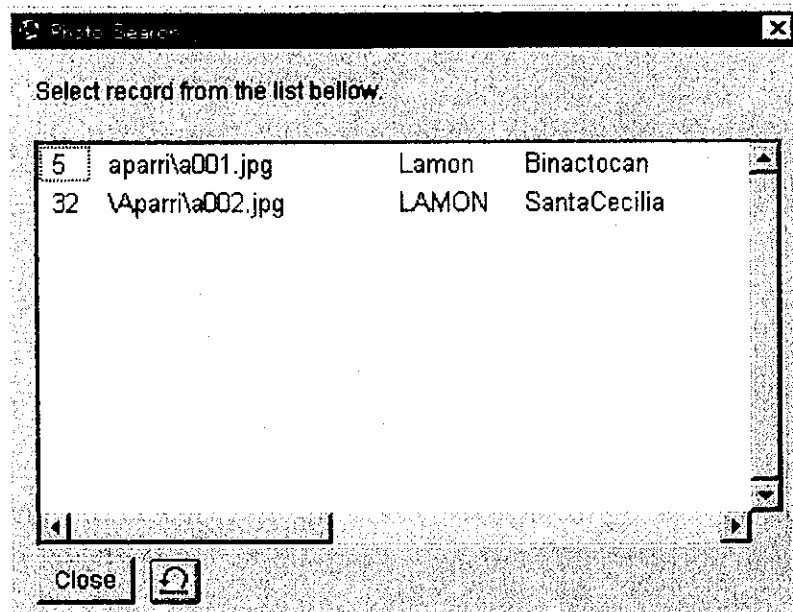


Figure 4-48 The photo attributes data dialog box.

Camera symbol which would like to show its photograph image can be selected in the dialog box and photograph image is immediately displayed by clicking selected record.

After selection, data in the dialog box is changed to display only the selected record and it is possible to return to the previous dialog box by clicking "Previous Selection" button.



Mangrove Attribute Display Tool

After checking that the mangrove theme is active, click on the area of mangroves you want to work on. (If you click on an area of mangroves with no features then you will hear a "beep.") The Mangrove Attribute display window will be displayed and you can then input or change data. It is also possible to select mangrove sub-compartment by dragging a box over a particular area with the mouse. The search results will be listed in the search window from which you can select an area of mangroves to work on. The Mangrove Attribute display window will be displayed and you can then input or change data.



Camera Attribute Display Tool

After checking that the photo theme is active, click on the Photo Attribute Display Tool and then click on the photo you want to work on. (If you click on an area with no features then you will hear a "beep.") The Photo Attribute Display window will be displayed and you can then input or change data. It is also possible to select photos by dragging a box over a particular area with the mouse. The search results will be listed in the search window from which you can select a photo to work on. The Photo Attribute display window will be displayed and you can then input or change data.



Identify Tool

When this tool is selected, the cursor changes to a crosshair with an "i." After checking that the theme for which you want to display attributes is active, click on the feature you want. (If you click on an area with no features then you will hear a "beep.") The attribute data for the feature you clicked will be displayed together with the search history. You can not make any changes to the data using this function.

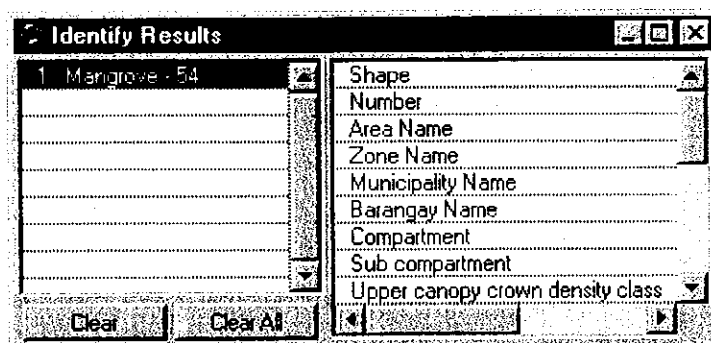


Figure 4-49 This shows attribute data and search history.



Pointer Tool

This tool is used to select features in Edit Mode etc. and for selecting graphics, etc. in views.



Vertex Edit Tool

Although you can select vertices by selecting this tool and clicking on a feature, remember that there are two ways of selecting features and that the method of moving vertices varies according to the selection method you choose.

Method 1

After selecting the Vertex Edit Tool, if you click inside a feature all of the vertices in that feature will be selected and hollow square handles displayed at the location of each vertex as shown in Figure 4-50.

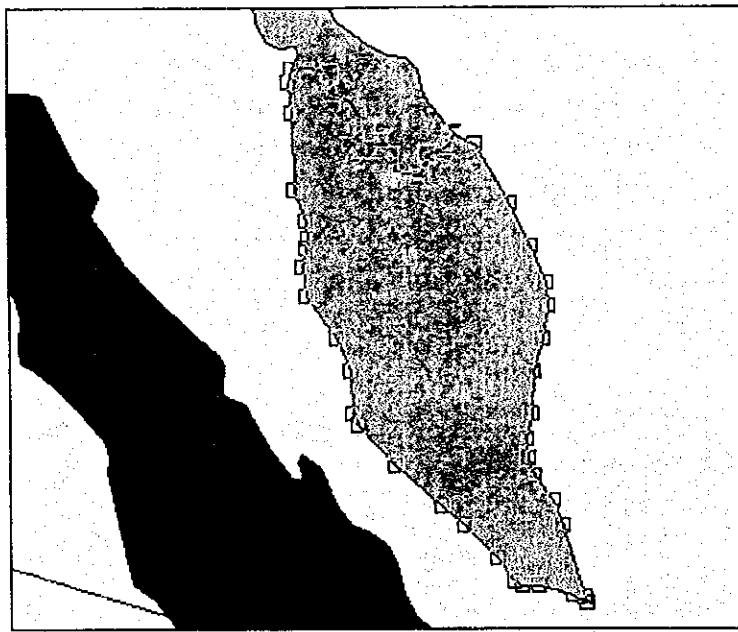


Figure 4-50 This shows the first method for selecting vertices.

You can change the shape of the feature by moving one of the handles as shown in Figure 4-51.

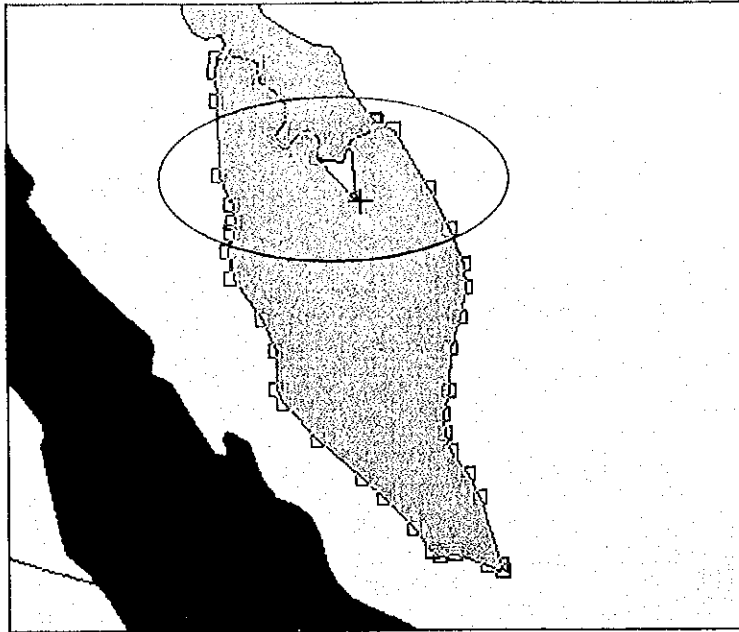


Figure 4-51 One of the handles in the selected feature has been moved.

By using the first method to designate a feature, you can select a feature and move it without moving the boundaries of bordering features.

Method 2

After selecting the Vertex Edit Tool, if you click on the boundary line of a feature, hollow square handles are displayed on the boundaries as shown in Figure 4-52.



Figure 4-52 This is an example of clicking on the boundary line of a feature.

Moving one of the handles moves that part of the boundary line and the shape of both features, as shown in Figure 4-53.

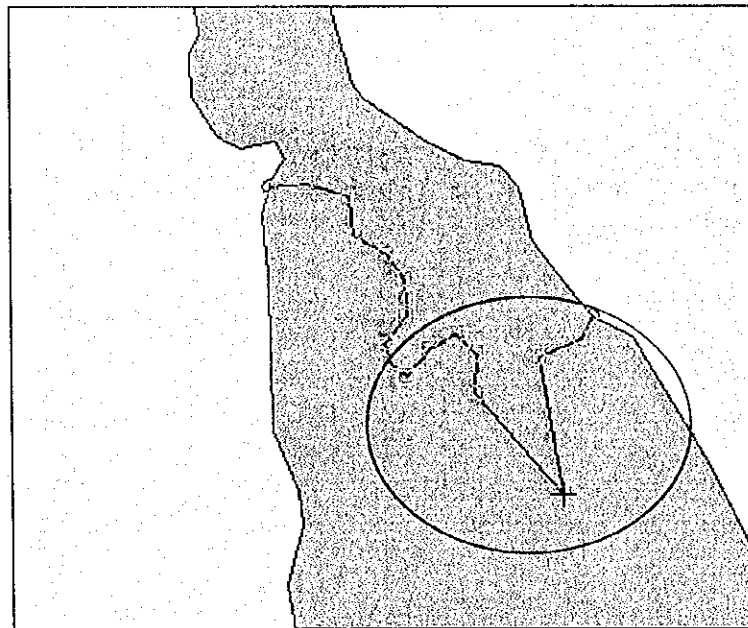


Figure 4-53 One of the handles on the boundary line has been shifted to change the shape of both features.

Clicking on the boundary line allows it to be moved and the shape of both features to be changed without each feature losing its unique characteristics.



Select Feature Tool

After checking that the theme for which you want to select a feature is active, click on the feature you want. It is also possible to select features by dragging a box over a particular area with the mouse. The search results will be listed in the search window from which you can select a feature to work on. When you want to select a multiple number of features in different areas of the map, hold down the "Shift" key and click on them individually.

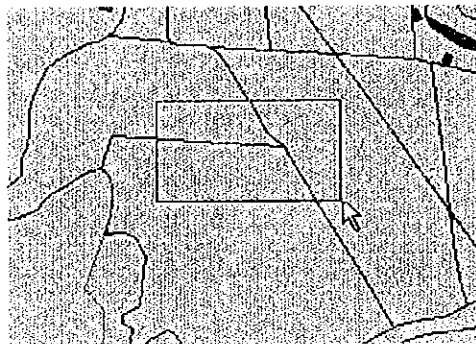


Figure 4-54 This is an example of a box being dragged over an area to select features.



Zoom in Tool

When you want to enlarge a particular area of the map, use the mouse to drag a box over the area after clicking on the "View Enlarge" tool as shown in Figure 4-55. The area selected will be enlarged.

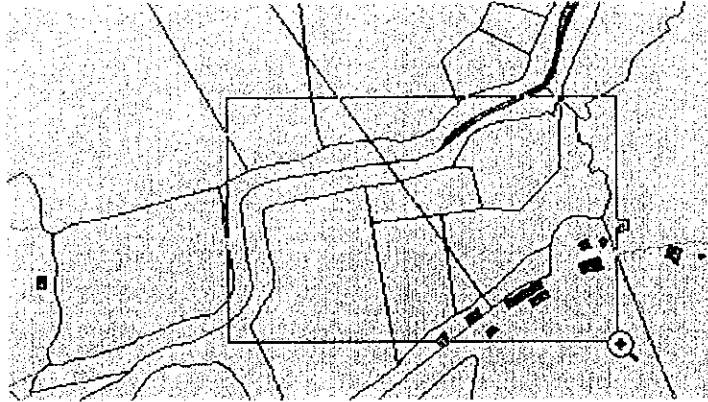


Figure 4-55 This shows a box being dragged over a particular area in order to enlarge it. The "+" in the magnifying glass shows that the "View Enlarge" tool has been selected.



Zoom out Tool

When you want to reduce a particular area of the map, use the mouse to drag a box over the area after clicking on the "View Reduce" tool as shown in Figure 4-56. The area selected will be reduced.

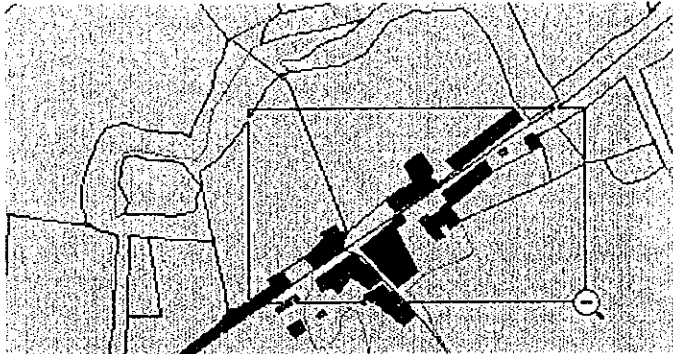


Figure 4-56 This shows a box being dragged over a particular area in order to reduce it. The "-" in the magnifying glass shows that the "Zoom out" tool has been selected.



Pan Tool

When you want to move a particular area of the map, after clicking on the "View Move" tool use the mouse to drag the map until the area you want is in view as shown in Figure 4-57. When you let go of the mouse button the map will stop moving.

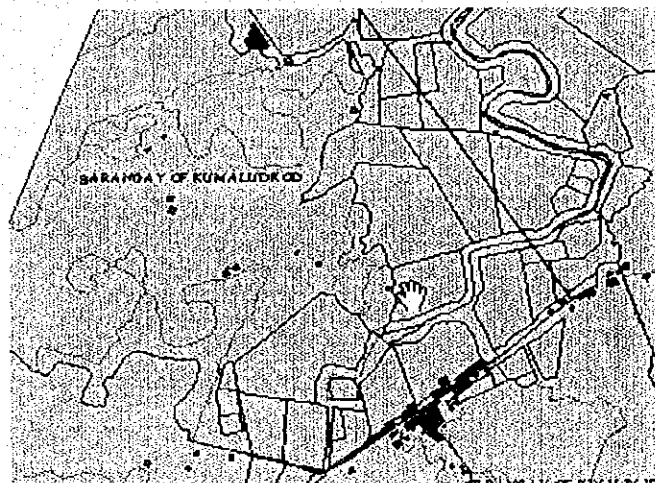


Figure 4-57 This shows the map being dragged to move it. The "hand" shows that the "Pan" tool has been selected.



Measuring Tool

After selecting the measuring tool, first click on the area you want to start measuring from and then drag the mouse to the end point and double-click to finish the operation. The unit of measurement is determined in the View Properties under "Map Unit." Measurements will be displayed in the bottom left of the view as shown in Figure 4-58.

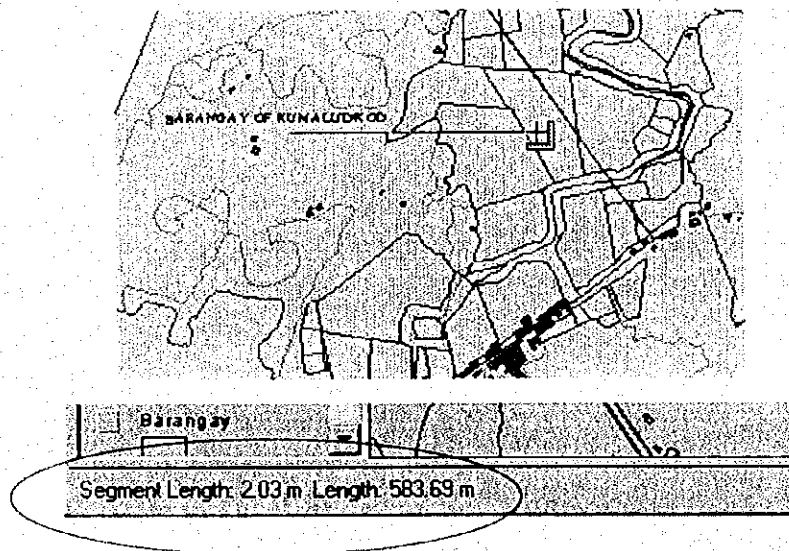


Figure 4-58 The upper part of this map shows the measuring line that has been drawn using the mouse while the lower part of the map shows the actual measurements obtained.



Label Tool

The Label Tool is one of ArcView's original tools. After checking that the theme to which you want to attach a label is active, check that the label field in the theme properties which is used by the text label is correctly set. If it is correctly set, click on the feature to which you want to attach the label. In order to delete the label you have just attached, use the arrow selection tool to select the label and then press the "Delete" key. The font, size, and color of the characters used in labels are set in the symbol window. Select "Show Symbol Window" from the "Option" menu to display the symbol window.



Text Tool

This function is also one of ArcView's original tools. You can use this function to create text on top of views. The font, size, and color of the characters used in labels are set in the symbol window. Select "Show Symbol Window" from the "Option" menu to display the symbol window.



Add Camera Symbol Tool

This function can be used when the photo theme is in Edit Mode. After you have selected this tool, select the location of the photo you want to add. For further information on how to add photos, please refer to the "Add Photo" function of the "Administrator" submenu of the "Option" menu in the menu reference section of the operating manual.



Mangrove Polygon Selection Tool in the Administrative Boundaries Theme

The top tool is used to select mangroves within administrative boundaries while the bottom tool is used to select mangroves which intersect administrative boundaries. First make the administrative boundary data (polygon theme) active. Then this tool is turned to select polygons in the active theme by clicking or using a rectangle. After you have finished selecting the polygons you require, the mangroves corresponding to the tools that you are using at present are selected. If you hold down the "Shift" key while selecting new mangrove sub-compartment you will be able to add to previous selections. You can then calculate the total land area of the mangrove sub-compartment by selecting "Total Area Selected" from the "Calculate" menu.



Socio-economic Survey Display Tool

After selecting this tool, click inside one of the designated Barangays. This will display Sheet 1 of the socio-economic survey data for villages in that particular area.

Area Code L	Social Infrastructure Barangah Hall - 1, Day Care Center - 1, Clinic - 1, Church - 1, Elementary - 1	Production Others n.a.	Fishpond Lease Agreement 2 (100ha, 70ha), (complet
Municipality Code CLG	Average Annual Income Approx. 9,000 Peso	Major Market/Shopping Place-1 Calauag	Mangrove Reforestation Project None
Barangay Code BLI	Production Forestry n.a.	Major Market/Shopping Place-2 Barikatan, (Women's Group), PTA, Religious Groups (3)	Mangrove Stewardship Agmt. None
Name of Baragay Buli	Production Fishery 1. Bakawin, 2. Isdang Bato	Coastal Environmental Program 1 (2ha)	Community-Based Forest Mgmt.
Name of Municipality Municipality of Calau	Production Agriculture 1. Copra, 2. Palay	No. of Fishpond (Private) None	Sheet2 Close
Municipality of Calau Number of Household 90			
Average No. of Family Member 5.34			
Rural Infrastructure Deepwell - 4, 0% electrified, Generator - 1 (priv.), Landing Pier, Multi-purpose, Pavement - 1			

Figure 4-59 An example of socio-economic survey data for a particular area.

Sheet 1 shows basic socio-economic data for the area from the socio-economic survey. Sheet 2 shows more detailed socio-economic data for each sitio.

Area Code L	Municipality Code CLG	Barangay Code BLI	Sino/Purok/Zone Code BLI-1
GENERAL		MAJOR INCOME SOURCE	
Average Number of Family Member 8.0	Dominant Language/Dialect Tagalog	Average Monthly Income 1000.00	Major Source of Income - Percentage of Fishy Sector 0.0
EXPENSES		LIVING CONDITION	
Average Monthly Expenses 3144.83	Percentage of self-consumption of Product 50.0	Dominant Product-1 n.a.	Major Source of Income - Percentage of Agricultural Sector 100.0
FISHPOND		OTHER ECONOMY	
Percentage of owning Fishpond 0.0	Intention to have own Fishpond 50.0	Dominant Product-2 Copra	Major Source of Income - Percentage of Other Sources 0.0
		Percentage of being avail of Loans/Credits 0.0	Percentage of joining Cooperatives/Organization 0.0
		Percentage of having own Houses 100.0	Percentage of having Fishpond 0.0
			Availability of Electricity 0.0
			Availability of Water 100.0
			Using Fuelwood as Major Fuel 0.0
			BLI-1
			BLI-2
			BLI-3
			BLI-4
			BLI-5
			Sheet3
			Statistics
			close

Figure 4-60 Sheet 2 of the socio-economic survey data.

Select the zone code you want from the list in the dialog box, as shown in Figure 4-60 and click the "Statistics" button to display statistics, such as average and total number of family members, average and total monthly income, etc. regarding that particular zone (Aparri, Lamon, or Ulugan).

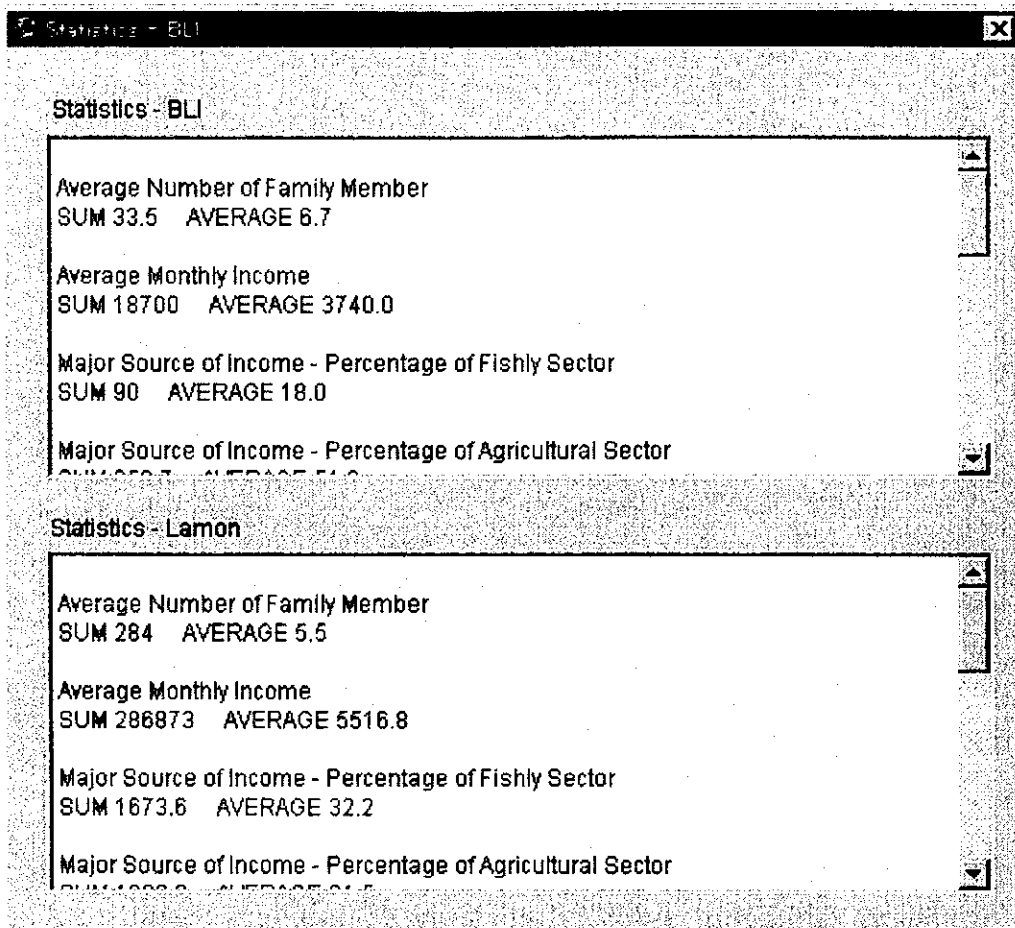


Figure 4-61 Sheet 3 of the socio-economic survey data.

Where a socio-economic survey has been carried out in villages, data will be displayed from Sheet 2. For villages where no socio-economic survey has been carried out, average and total information for the region as a whole will be provided (Aparri, Lamon, Ulugan).

Sheet 4 includes statistical data regarding mangrove forest utilization and conservation.

Area Code	Municipality Code	Barangay Code	Sitio/Purok/ZoneCode
[1]	CLG	BLI	BLI-1

ENTER/COLLECT	
Percentage of entering Mangrove Area in the Past One Year	50.0
Percentage of collecting Mangrove Trees as the Reason to Enter	50.0
Percentage of Having Negative Sence to Collect Mangrove Trees	100.0

PRESENT USE	
Percentage of Using Mangrove Trees at Present	50.0
By Entaring and Cutting	0.0
By Collecting fallen trees	50.0
By Buying trees	0.0
Purpose of Use	Dyeing

PAST/FUTURE	
Percentage of having used Mangrove Trees within Past 3 Years	0.0
Percentage of having used Mangrove Trees for more then Past 3 Years	0.0
Percentage of having intendon to use Mangrove Trees in the Future	0.0

OTHER FOREST USE	
Percentage of using Mangrove Forest as Fish Nursery	0.0
Percentage of using Mangrove Forest as Windbreak	0.0
Percentage of using Mangrove Forest as Wave Dispersant	0.0
Percentage of finding importance in maintaining Mangrove Forest	100.0

SENCE	
Percentage of willingness to protect Mangrove Forest in active way	100.0
Percentage of granting Mangrove cutting as source of living	50.0

BLI-1
BLI-2
BLI-3
BLI-4
BLI-5

Statistics
close

Figure 4-62 Sheet 4 of the socio-economic data showing mangrove forest statistics.

In the same way as for Sheet 2, data for each village is provided. Select the zone code you want from the list in the dialog box, as shown in Figure 4-62 and click the "Statistics" button to display statistics, such as average and total number of family members, average and total monthly income, etc. regarding that particular zone (Aparri, Lamon, or Ulugan). For villages where no socio-economic survey has been carried out, average and total information for the region as a whole will be provided (Aparri, Lamon, Ulugan).

4-4 Feature Tool

The Feature Tool is a high level editing tool for editing mangrove polygons. Select "Mangrove Sub-compartment" from the "Edit" submenu of the "Document" menu in order to launch the Feature Tool.

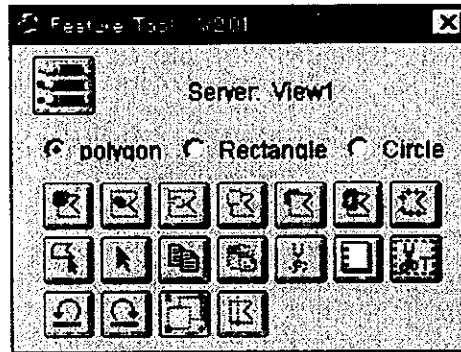


Figure 4-63 The Feature Tool.

The Feature Tool is only used for editing polygons. Necessary buttons for editing polygons, etc. are contained in the tool bar of the Feature Tool. (These edit functions cannot, however, be used for editing lines or points.)

Although the mangrove theme is automatically made active when the Feature Tool is launched, it is possible to use the Feature Tool to edit other polygon themes. However you must first, make the new theme active. Click on the "Pencil" icon to enter Edit Mode and the "Stop" icon to exit Edit Mode.

When you enter Edit Mode, buttons which were previously grey, indicating that they could not be used as shown in Figure 4-63, change to black as shown in Figure 4-64, showing that they can now be used.

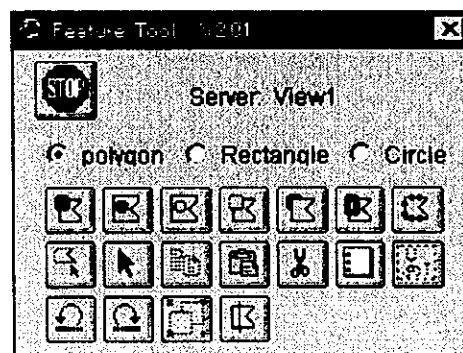


Figure 4-64 The Feature Tool after Edit Mode has been entered.

Select the draw mode you want from the Polygon, Rectangle, and Circle options. The shapes that you can draw with the mouse will vary according to the mode you have chosen.

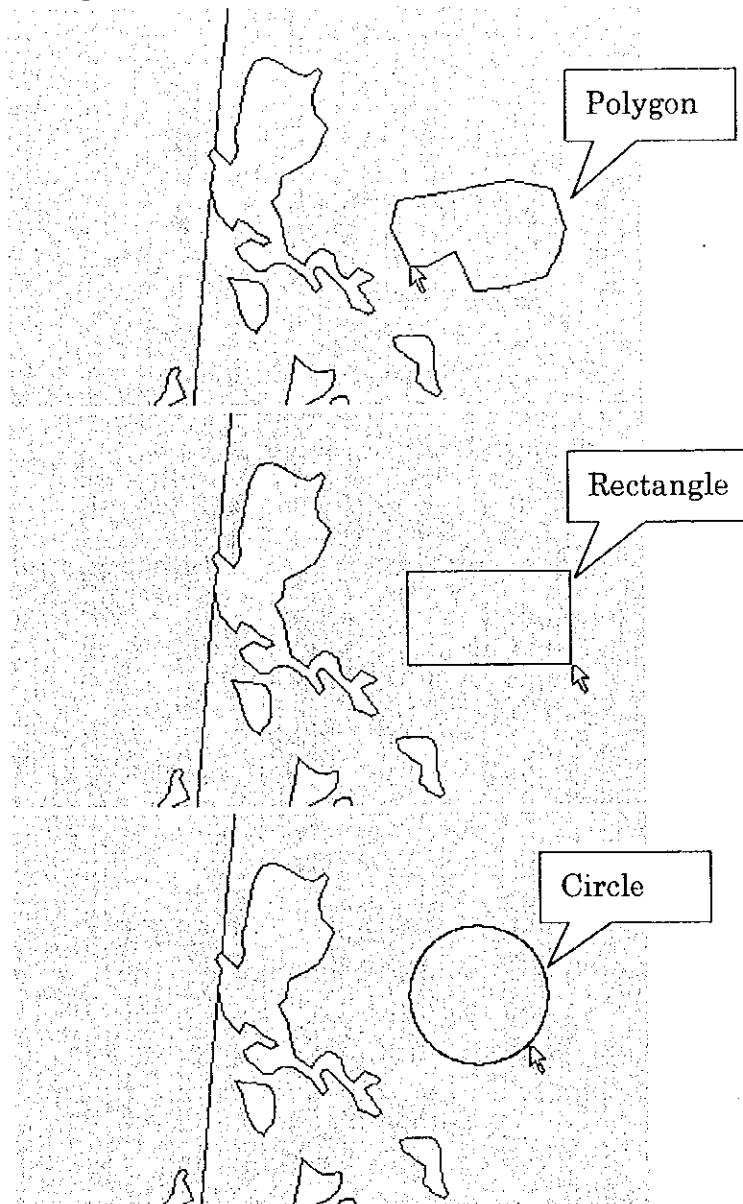


Figure 4-65 These diagrams show examples of the shapes that can be drawn in the different draw modes. The top diagram is an example of what can be drawn in the Polygon Mode, the middle diagram is an example of what can be drawn in the Rectangle Mode, and the bottom diagram is an example of what can be drawn in the Circle Mode.

Depending on which draw mode you are in, you will find that some buttons will not be able to be used, in which case they will appear as gray icons. For example, the shape-joining tool can not be used unless more than two features have been selected.

Click on the "X" mark in the top right of the Feature Tool window to close it.

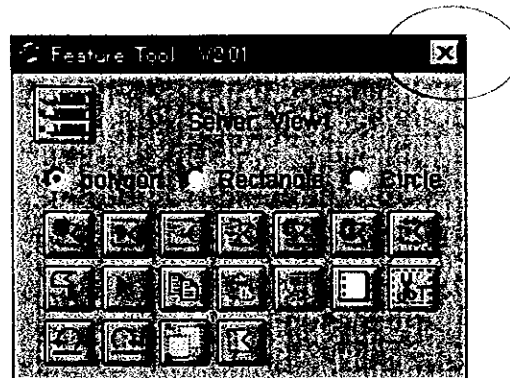


Figure 4-66 The "X" mark in the top right of the Feature Tool window.

The function of the various tool buttons in the Feature Tool window is explained below.



Edit Start Button

After checking that the theme you want to edit is active, click on this button to enter Edit Mode. Click on the "Stop" icon to exit from Edit Mode.

After editing the theme for some time, it is probably a good idea to exit Edit Mode in order to save the changes you have made.



Edit Stop Button

Click on this button to exit from Edit Mode. You will only see the "Stop" icon when you are in Edit Mode. If you are not in Edit Mode then you will see the "Pencil" icon.



Free Insert Button

After selecting this button, you can freely create the shape of polygon you desire. The new polygon will be placed on top of existing polygons. This button allows you to locate polygons anywhere.



Internal Insert Button

After selecting this button, you can create a polygon inside an existing polygon. Although the new polygon will be placed on top of existing polygons, if the new polygon is not inside or bordering an existing polygon then it can not be created.



Internal Cut Button

After you have selected this button, you can freely create a new polygon inside an existing polygon. The new polygon is used to delete an area from within existing polygons. If the new polygon is not inside or bordering an existing polygon then it can not be created.



Free Cut Button

After you have selected this button, you can freely create a new polygon. The new polygon is used to delete an area from within existing polygons. As polygons can be created anywhere existing polygons can be freely cut.



Insert Behind Button

After selecting this button, you can freely create the shape of polygon you desire. The new polygon will be located behind existing polygons. The new polygon can be located anywhere. This function is useful when you want to fill in areas which have holes taken out of them.



Donut Polygon Button

After selecting this button, you can create the shape of polygon you desire. The new polygon will be located on top of existing polygons. If existing polygons are completely covered by the new polygons, then they will need to be relocated on top of the new polygon. This function is useful when you want to locate shapes between polygons.



Figure 4-67 This is an example of editing a Donut Polygon.



Vertex Edit Button

After selecting the Vertex Edit Tool, if you click inside a feature all of the vertices in that feature will be selected.

Although you can select vertices by selecting this tool and clicking on a feature, remember that there are two ways of selecting features and that the method of moving vertices varies according to the selection method you choose.

a) Individual Selection

After selecting the Vertex Edit Tool, if you click inside a feature all of the vertices in that feature will be selected and hollow square handles displayed at the location of each vertex as shown in Figure 4-68 (top). You can change the shape of the feature by moving one of the handles as shown in Figure 4-68 (bottom). By using this method to designate a feature, you can select a feature and move it without moving the boundaries of bordering features.



Figure 4-68 The top diagram shows all of the vertices in the feature have been selected by clicking inside the feature. The bottom diagram shows one of the handles in the selected features has been moved.

b)Boundary Line Selection

After selecting the Vertex Edit Tool, if you click on the boundary line of a feature, hollow square handles will be displayed on the boundaries as shown in Figure 4-69 (top). Moving one of the handles moves that part of the boundary line and the shape of both

features, as shown in Figure 4-69 (bottom). Clicking on the line allows the boundary to be moved and the shape of both features to be changed without each feature losing its unique characteristics.

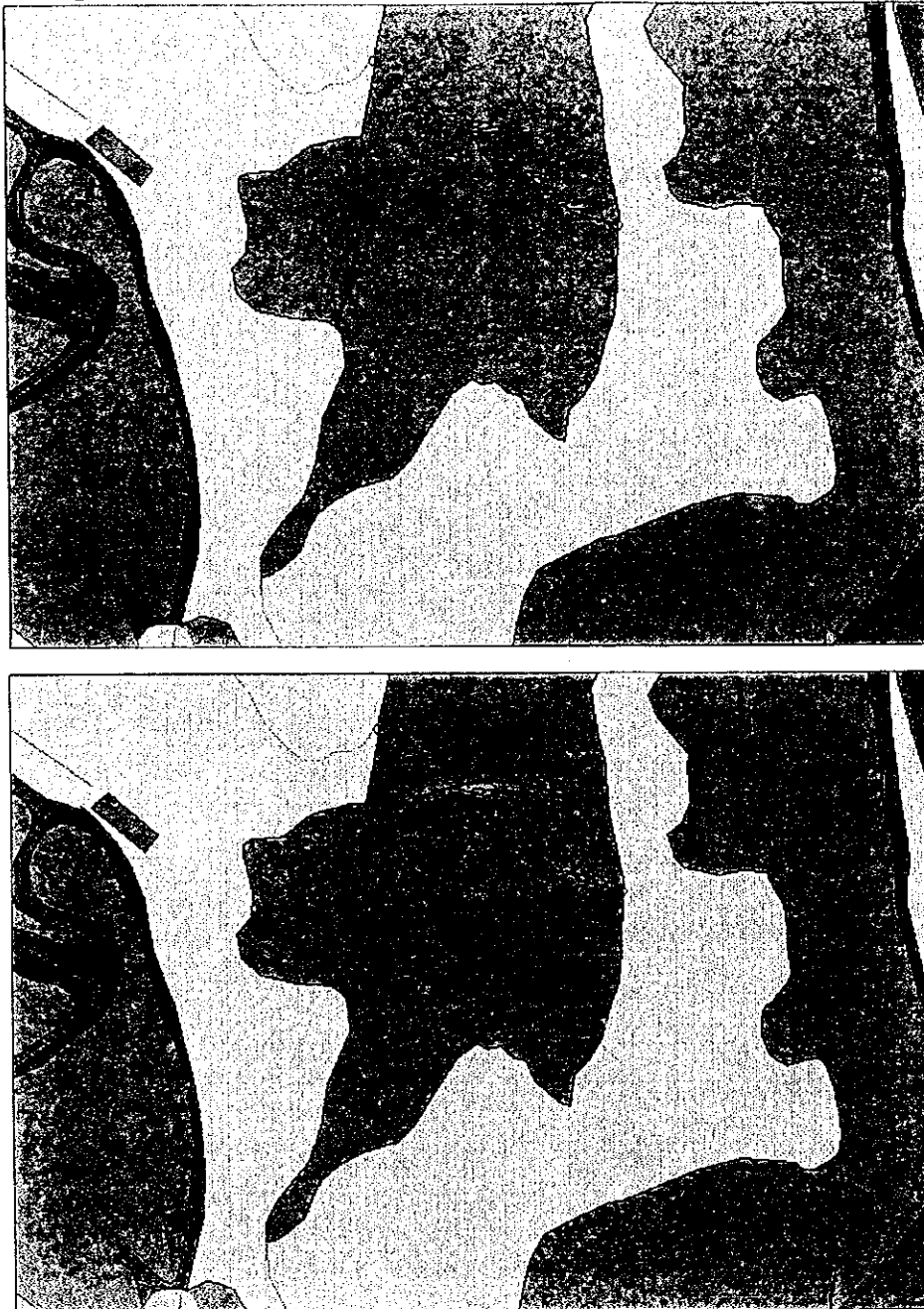


Figure 4-69 The top diagram shows an example of clicking on the boundary line of a feature while the bottom diagram shows one of the handles on the boundary line has been shifted to change the shape of both features.



Select Shape Button

This tool is used to select the shape of polygons when you are in a non-editing mode. If it is a bordering shape then multiple polygons can be selected.

This function can be used to create shapes using existing shapes. Select the "Copy Selected Features" button after selecting a polygon, etc. with this tool.



Point Button

If you click on a polygon after selecting this tool, black handles will be displayed around the border of the selected polygon. Use the "Shift" key to add additional polygons to your selection. If you click in an area where there are no polygons then all previously selected polygons will be deselected. After you have completed your selection, select the function you want to apply to the selected polygons.



Figure 4-70 An example of the selection process mentioned above.



Copy Selected Features Button

If a polygon has been selected in the active theme, a temporary theme can be created and that shape pasted into the temporary theme. The new theme into which the shape is to be pasted is the "wrktm**" theme (hereafter referred to as the "work theme"). The directory in which the work theme is to be saved is the TMP directory. When no TMP directory exists, only when no long file names are included in the pass name of the project file, the temporary theme can be automatically created. (Note: When this file is being created

the screen may momentarily go dark.) For passes including long file names, a message will be displayed promoting you to create the TMP directory. If this message is displayed, stop what you are doing in ArcView and create it separately.

After the shape has been pasted to the work theme the work theme then becomes the active theme.

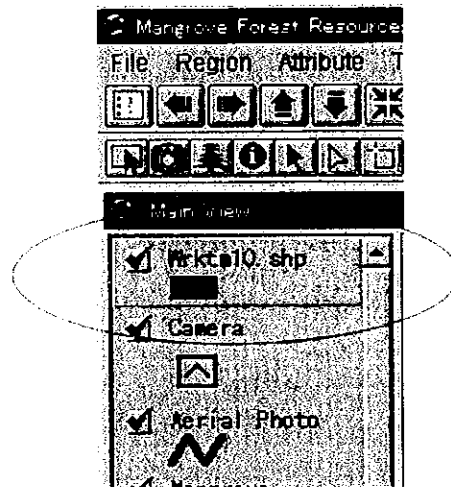


Figure 4-71 If the Shape Copy function is used you will see this in the main view.

If you then select the Edit Start button without touching anything else you will be able to edit the shape you have just copied and pasted into the work theme. You can edit the shape in the work theme in just the same way as you would in any other active theme by using the tools in the Tool Bar.

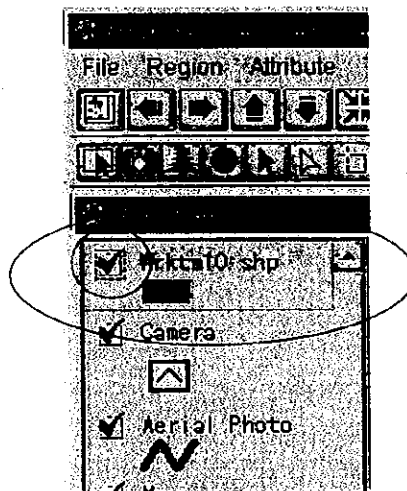


Figure 4-72 The dotted line around the work theme box shows that the work theme is in the Edit Mode.



Paste Shape Button

The shape has now been copied from the active theme into the work theme which is now in the Edit Mode. The Paste function is not available when no work themes exist or when nothing has been copied. Next, enter Edit Mode in the theme in which you want to paste the shape (Mangrove in this example. See Figure 4-74). After you have checked that it is active, press the Paste button. You will then be asked to select the theme from which you want to paste the shape.

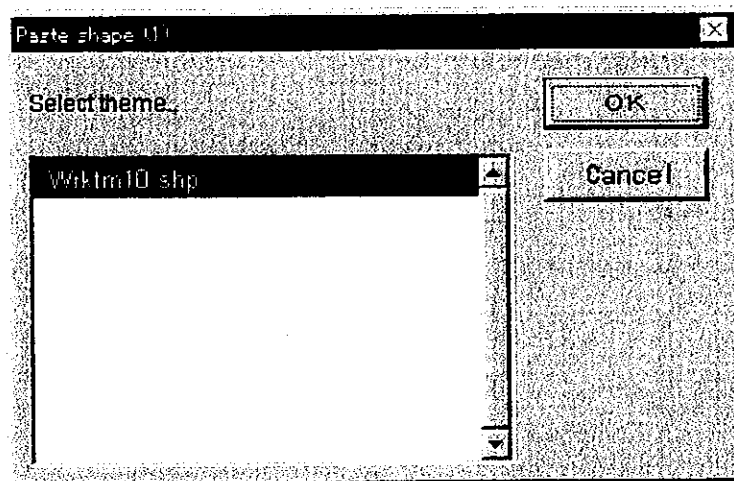


Figure 4-73 You will be asked to select the theme from which you want to paste the shape.

After you have selected the theme from which you want to paste the shape, press the "OK" button. You will then be asked whether you really want to paste the shape in the theme you have selected into the destination theme which is already in Edit Mode.

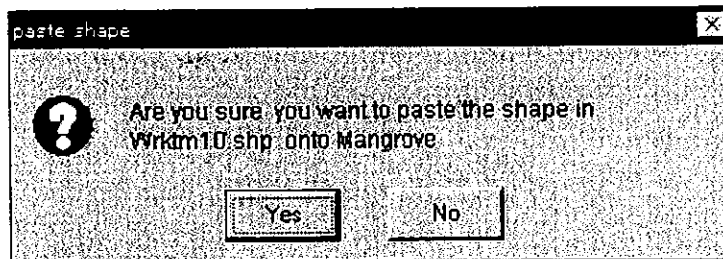


Figure 4-74 You will then be asked if you really want to paste the shape in the theme you have selected into the destination theme.

If you press "Yes" you will be asked to select the paste mode, as shown in Figure 4-75.

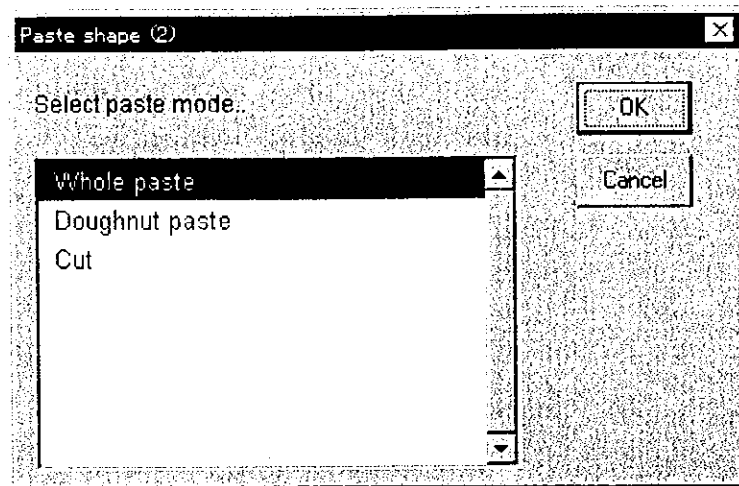


Figure 4-75 Select the paste mode.

As shown in Figure 4-74, there are three modes for pasting from the work theme.

a) Whole Paste

This mode pastes the shape from the work theme directly on top of existing shapes as shown in Figure 4-75.



Figure 4-75 An example of a Whole Paste.

b) Donut Paste

This mode pastes the shape from the work theme directly on top of existing shapes, however, any existing shapes which would be completely covered by the newly pasted shape are brought to the front as shown in Figure 4-76.



Figure 4-76 An example of a Donut Paste.

c)Cut

This mode does not paste the shape from the work theme directly on top of existing shapes but cuts out the destination shape as shown in Figure 4-77.



Figure 4-77 An example of a Cut.

Shapes can also be copied and pasted between ordinary themes, allowing you to create the optimum shapes for your projects. After you have finished pasting, the paste source work sheet is automatically deleted.



Remove Button

After selecting the features you want to delete, use this button to delete them.



Clear Selected Features Button

This button deselects the active theme.



Delete Work Theme Button

This function allows you to delete the work theme (wrktmxxx), which was created when you carried out the paste operation, from the view.



Undo Button

The Undo button allows you to undo the most recent operation you have carried out as long as you have done nothing else since that time. After something has been saved the Undo Button will not be able to change it.



Redo Button

The Redo button allows you to redo the most recent operation you have carried out as long as you have done nothing else since that time.



Union Feature Tool

This function allows you to join adjoining shapes. You can not join shapes which are separated. This function can only be used when more than two shapes are selected. When this function is used, all selected shapes are joined together to form one new shape. The attributes of the new shape must be input as none of the attributes of the previous features are retained. You can do this by setting them in the "Renew Attributes When Editing" theme property.

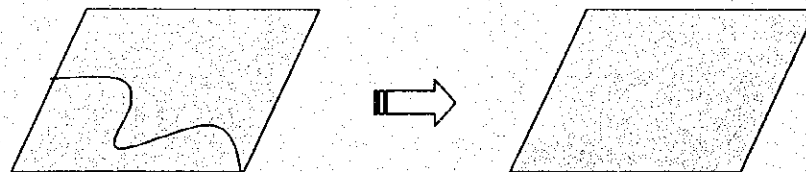


Figure 4-78 Adjoining shapes are joined into one new shape by using the union feature Tool.



Draw Line to Split Feature Tool

This function allows you to cut a designated shape along a designated line. Remember that cutting large shapes sometimes takes an incredible amount of processing time.

