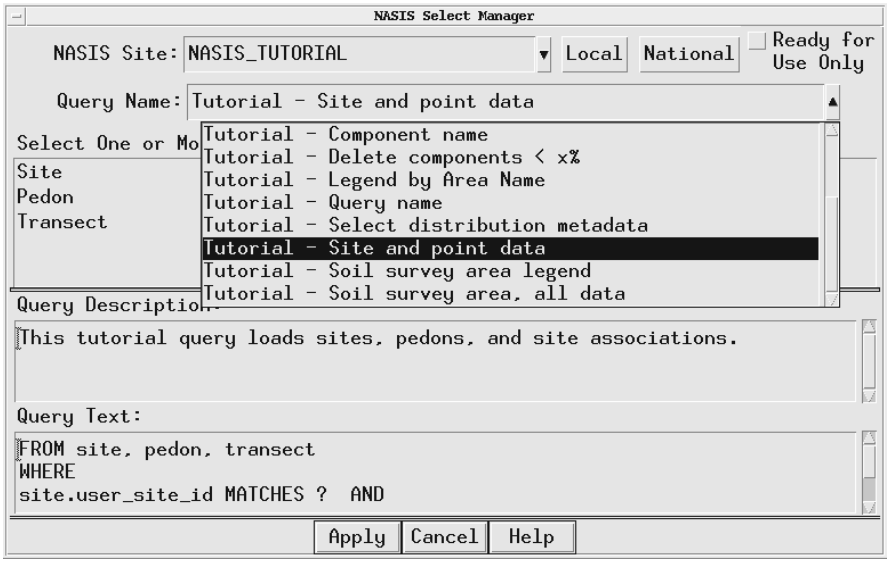
Chapter 18 Examining the Site and Point Data

The Site, Pedon, Site Association and Transect objects contain numerous tables for entering and maintaining site and point data in NASIS. In NASIS, the Site, Pedon, Site Association, and Transect tables can be completed independently of the mapunit data. Links between the major areas can be established as appropriate.

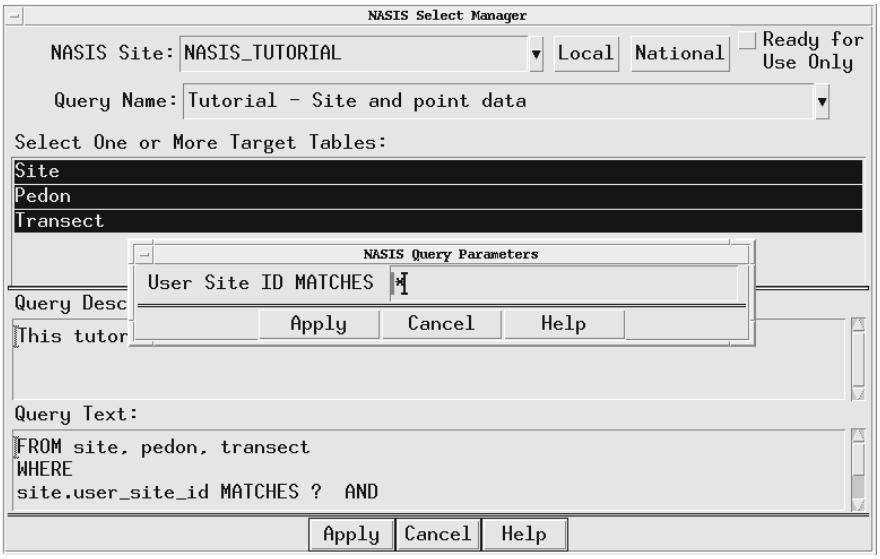
Selecting Site and Pedon Records

1. On the **File** menu, click **Select**.
2. In the **Query Name** field, click the choice list arrow.
3. In the list of queries, highlight **Tutorial – Site and point data**.



4. Highlight all three target tables.
5. Run the query by clicking on the **Apply** button on the Select Manager.

   Note: The NASIS Query parameters dialog box will appear. It allows you to fill in values for the desired sites.
6. In the NASIS Query Parameters dialog, type ***** in the **User Site ID MATCHES** field.



7. Click **Apply** on the Query Parameters dialog.

   Note: A message box informs you that 2 rows were added to the Site table, 2 rows were added to the Pedon table, and 1 row was added to the Transect table.

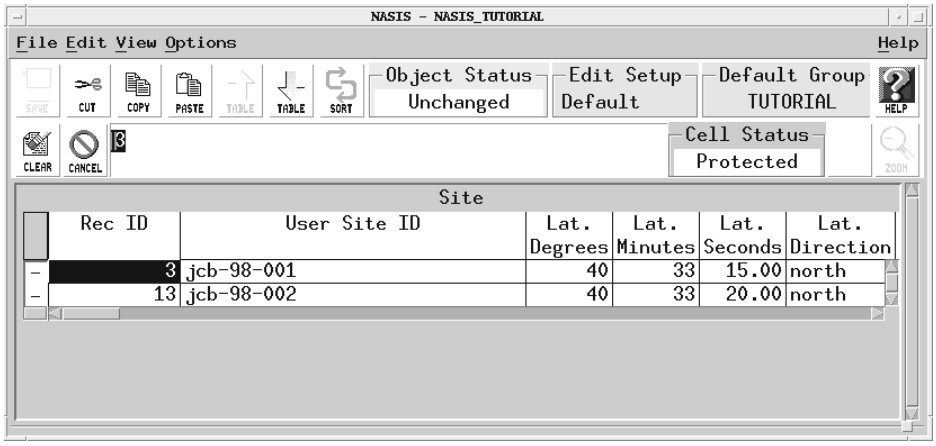
8. Click **OK**, then click **Cancel.**

9. Click **Cancel** again to close the Select Manager.

Examining the Site Tables

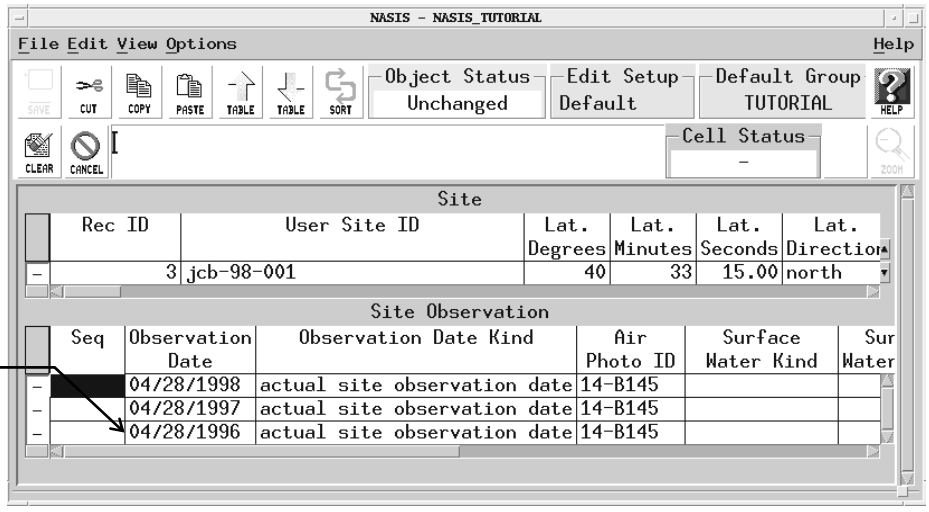
The Site table describes the location and characteristics of a particular geographic location. A site may be a specific location such as a point where a soil profile description is taken, or it may have some spatial area that is chosen to be treated as a single point. Various kinds of data such as soil profile descriptions, lab data, vegetative data, and so forth, may be linked to a site in this database.

1. On the **View** menu, click **Sites** then click **Site**.



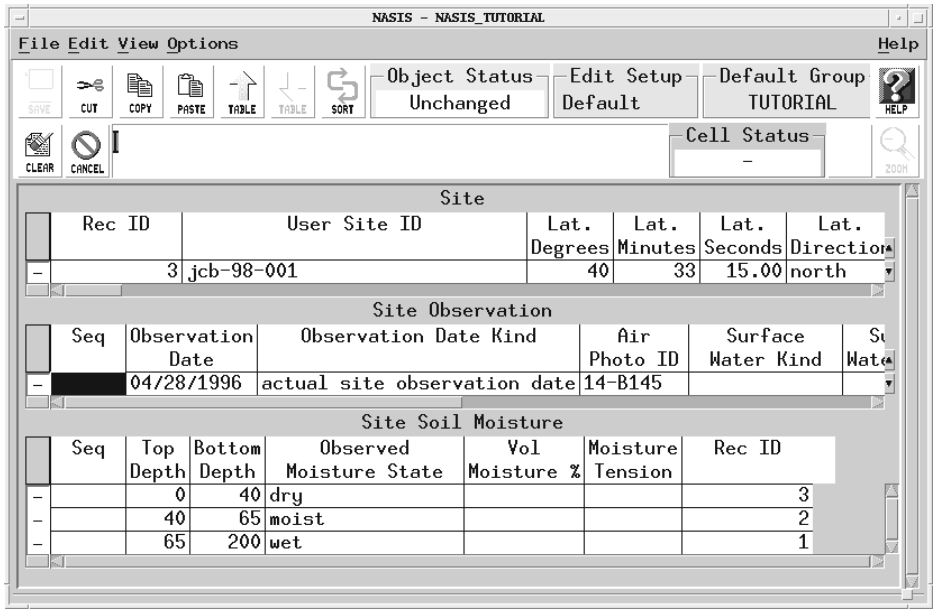
2. Use the Help button to examine the table explanation and data element explanations in the Site table

3. After examining the **Site** table, click on Rec ID 3 row, then click the **Down Table** button.



Note: The Site Observation table records the date that the various observation or analytical data was collected for the specific site or location. Soil or site properties that may change with time are also recorded here. If a site is revisited at a later date for additional data collection, a new row with the appropriate date is entered in this table. Separate tables exist for properties that may have multiple entries.

4. After examining the Site Observation table with the Help button, position your cursor in the row with the **4/28/1996** observation date, then click the **Down Table** button again.



Note: The Site Soil Moisture table describes the soil moisture profile at this site at the time of observation. A soil moisture profile may be recorded on different

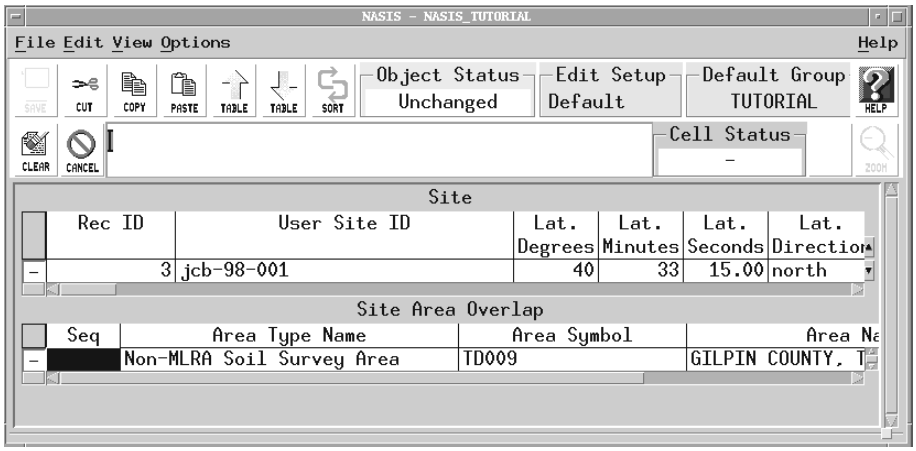
dates by entering a new row and date in the Site Observation table and then entering the moisture data in this table.

5. Use the Help button to examine the other columns on the Site Soil Moisture table.

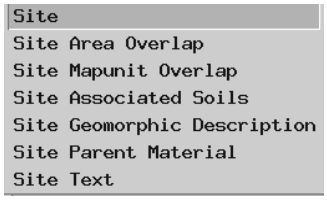
Examining the Site Area Overlap

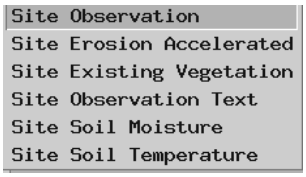
This table is used to record and document point site data collected on a geographic area basis such as MLRA, county, state or soil survey area.

1. On the **View** menu, click **Sites**, then click **Site Area Overlap**.



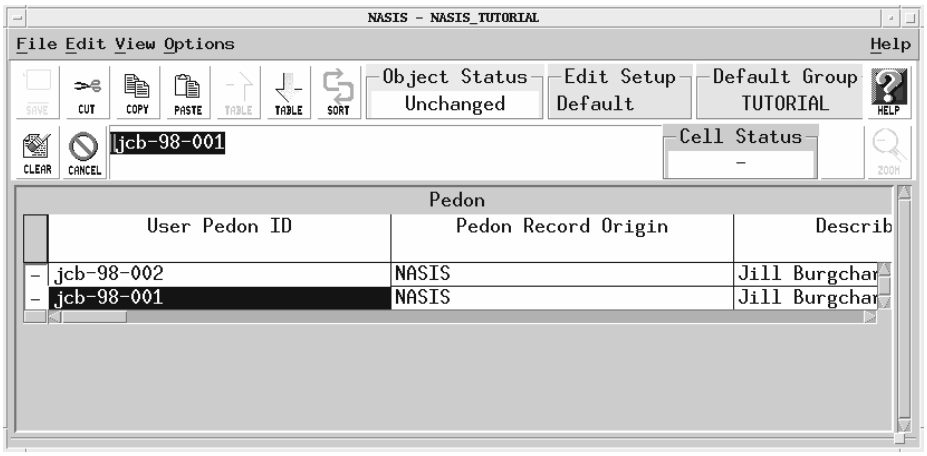
Note: The other tables on the Site and Site Observation menus have additional data on the site location and specific site observations.





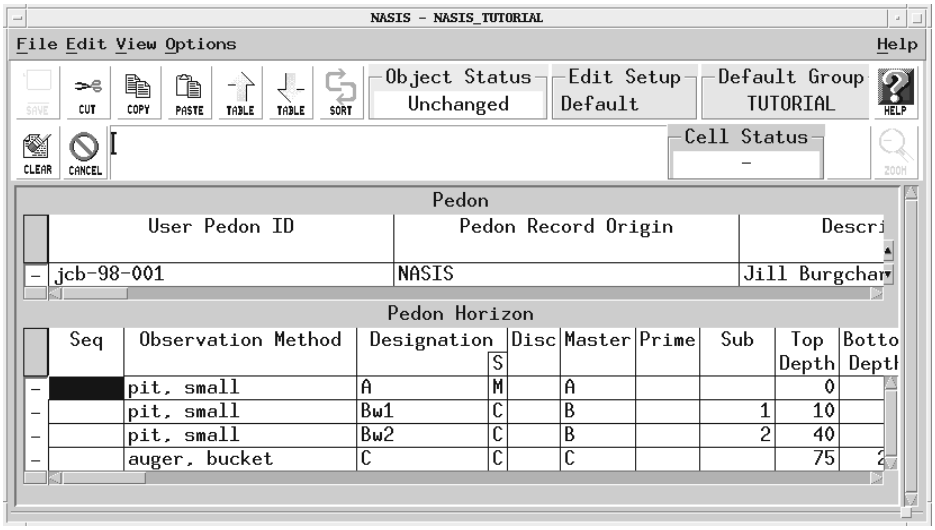
Examining the Pedon Tables

1. Click **Up table** to return to the Site table. Position the cursor in **Rec ID 3** row.
2. On the **View** menu, select **Find Related**, then click **Pedon**.



Note: The Pedon table contains information collected at the time a soil profile description is made. It has data that relates to the profile as a whole. User Pedon ID jcb-98-01 is related to Site Rec ID 3. User Pedon ID jcb-98-002 is displayed because you marked the Pedon table (as well as the Site and Transect tables) when you ran the query to build your selected set.

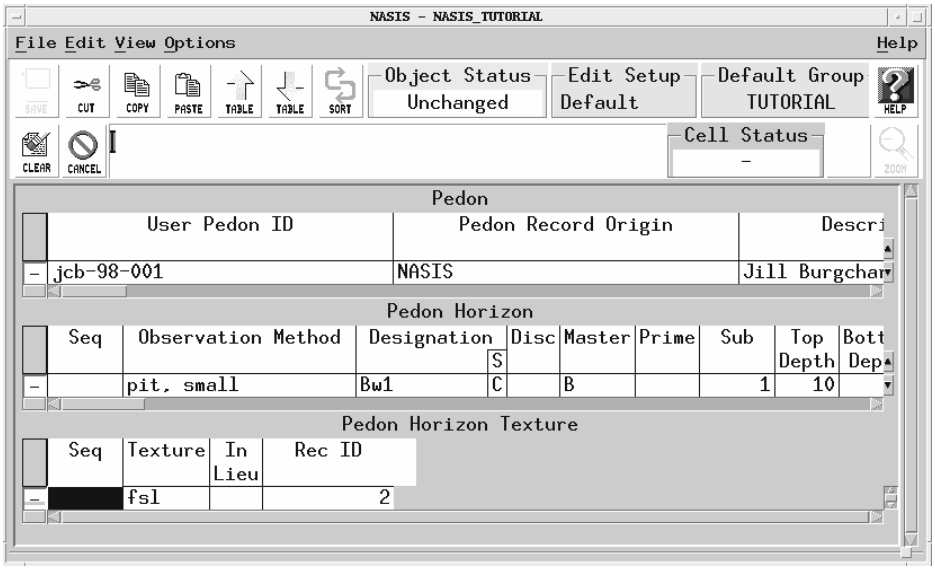
3. Use the Help button to examine the table explanation and data element explanations in the Pedon table.
4. After examining the **Pedon** table, click the **Down table** button.



Note: The Pedon Horizon table lists the horizons for each pedon. If the horizon thickness is greater than zero (low=5, RV=8, high=12), the horizon exists throughout the exposure of the profile. If the horizon thickness includes zero (low=0, RV=1, high=3), the horizon may exist in some places, but may not exist in other places.

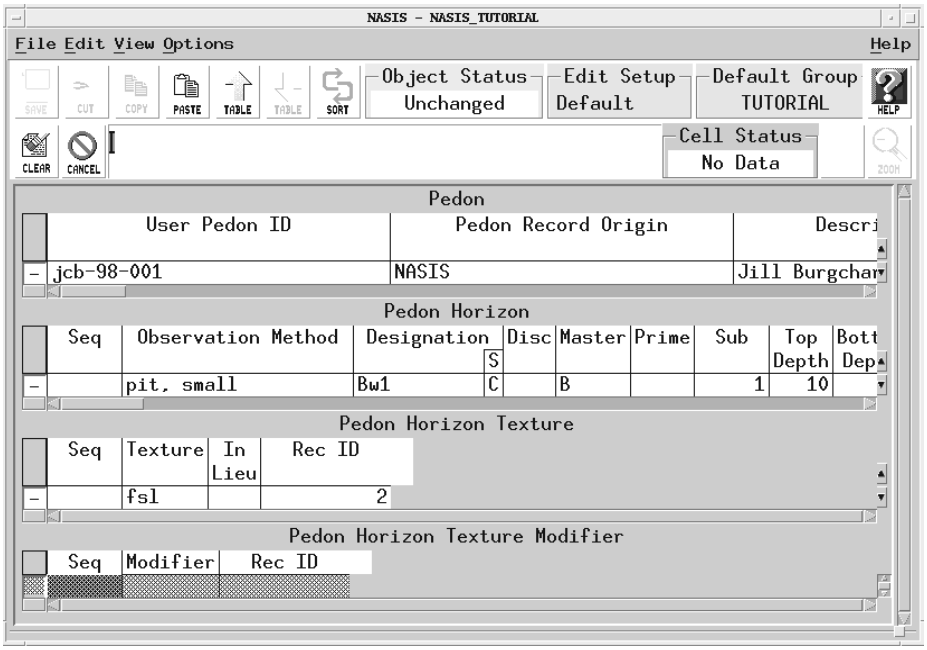
Horizons that have two distinct parts, such as E/B or E & Bt, are recorded twice. Once for the characteristics of the first part, and again on another row, using the same depths and thicknesses, for the characteristics of the other part.

5. After examining the Pedon Horizon table with the Help button, click in the row with the **Bw1** designation, then click the **Down table** button.



Note: The Pedon Horizon Texture table lists the texture or terms in lieu of texture.

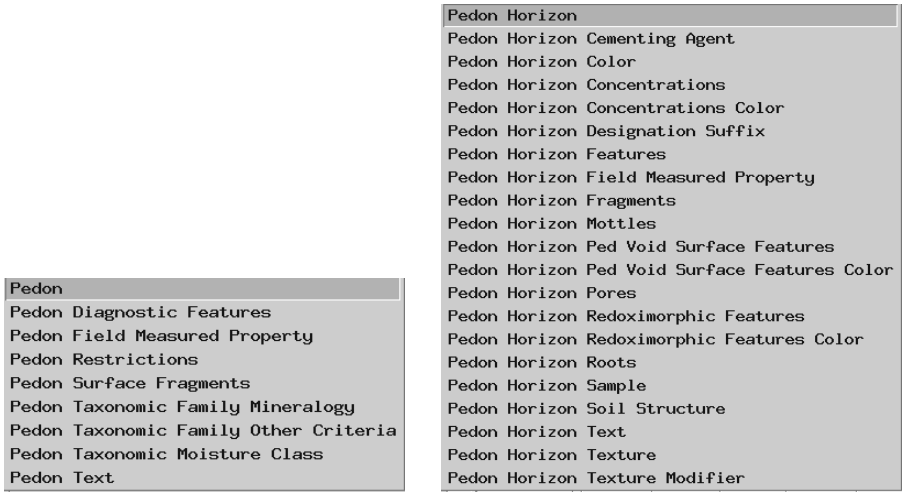
6. After examining the Pedon Horizon Texture table, click the **Down table** button.



Note: The Pedon Horizon Texture Modifier table is displayed. The texture modifier and class column (Tex Mod & Class) in the Pedon Horizon table is a calculated field based on the texture term in the Pedon Horizon Texture table and

the textural modifier in the Pedon Horizon Texture Modifier table. The example in the tutorial database does not contain a modifier.

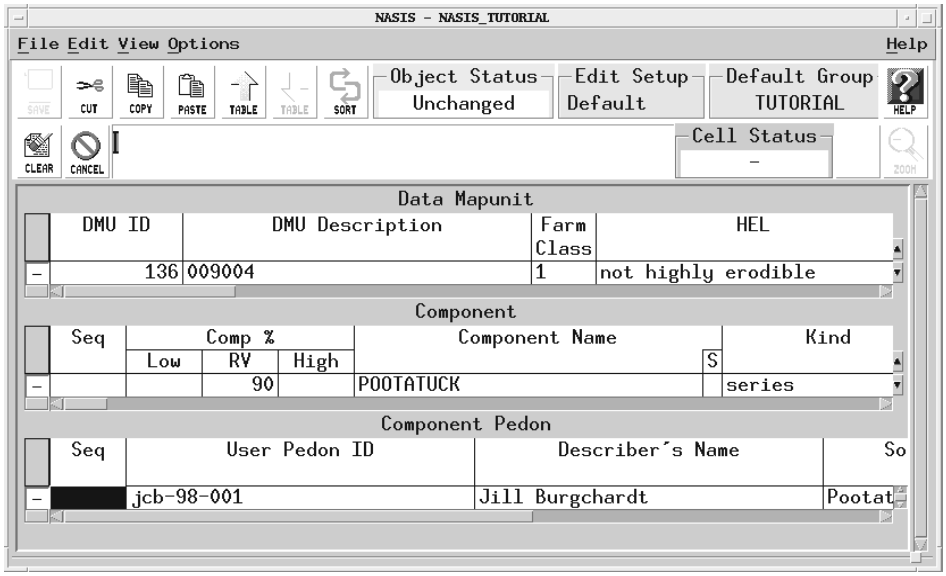
Note: The other tables in the Pedon object are shown on the Pedon and Pedon Horizon menus and accessed through the View menu have additional data on the pedons and pedon horizons.



Examining the Link between Pedons and Components

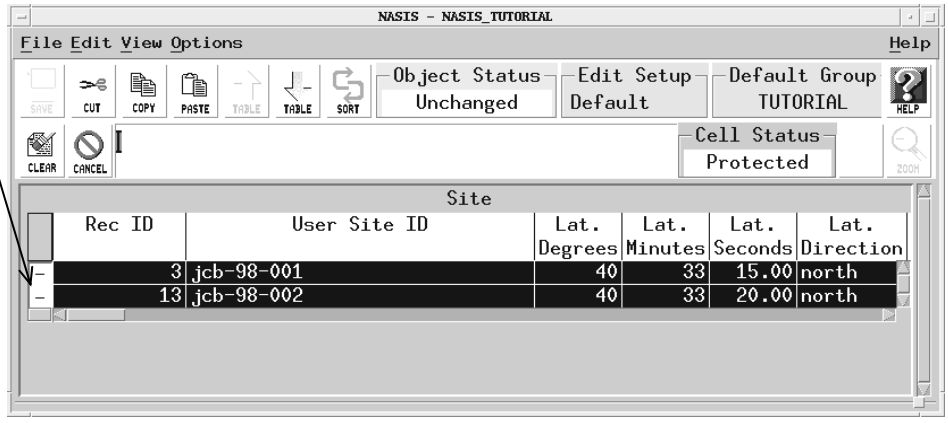
1. Position your cursor in the **Pedon** table.
2. On the **File** menu, choose **Load Related**, then click **Component Pedon**.

   Note: A message appears indicating one row was added to the Pedon Component table. Click **OK**.
3. On the **View** menu, click **Find Related**, then click **Component Pedon**. The component that is linked to this pedon is displayed.



Examining the Site Association tables

1. On the **View** menu, select **Sites**, then click **Site**.
2. Highlight both rows of the **Site** table.

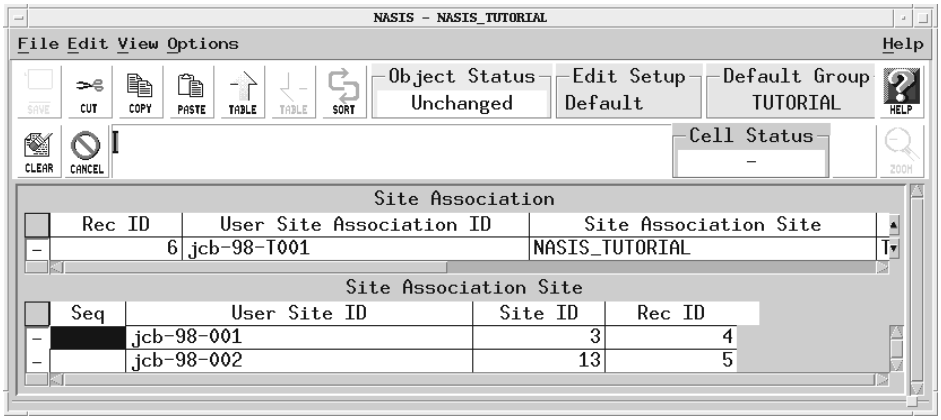


Dragging your cursor in the status column selects multiple rows

3. On the **File** menu, select **Load Related**, then click **Site Association Site**.

   Note: A message will indicate that 2 rows have been added to the Site Association Site table.

4. On the **View** menu, select **Find Related**. Select **Site Association Site** from the list of choices.



Note: The Site Association table is used to record some natural or artificial grouping of sites. Types of groupings may be recorded as needed by the user.

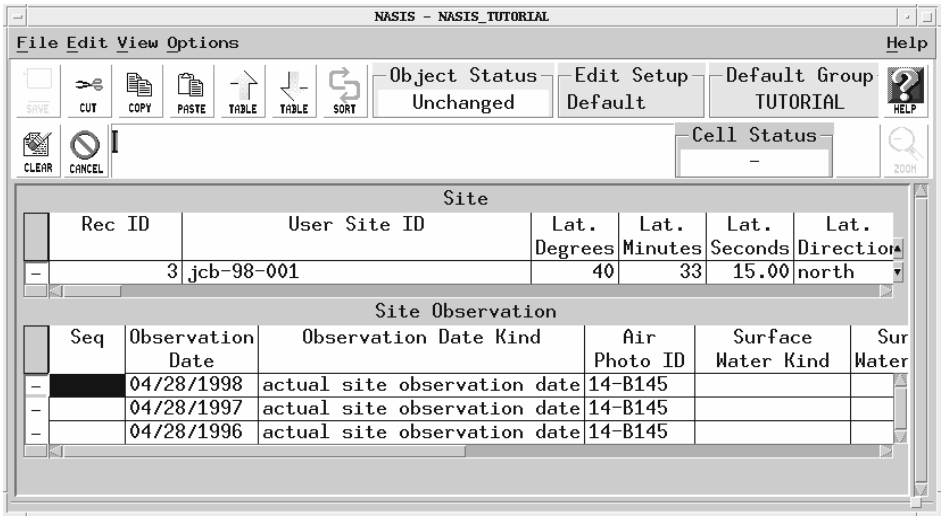
The Site Association Site table records the identifier of a site that is a member of a particular site association. A site association may contain any number of sites, and a site may be a member of more than one site association.

5. Use the Help button to examine the table and column descriptions for both tables.

Linking to specific observation dates

The Site Association table allows grouping of sites for many purposes. However, it has a limitation in that associations are linked by site not by site observation. If multiple observations are made at a site, it may be that only one observation should be associated with the other site associations. For example, review the observations for Site Rec ID 3.

1. On the **View** menu, click **Sites** then **Site**.
2. With the cursor positioned in the Rec ID **3** row, click **View**, **Site Observations**, then **Site Observation**.

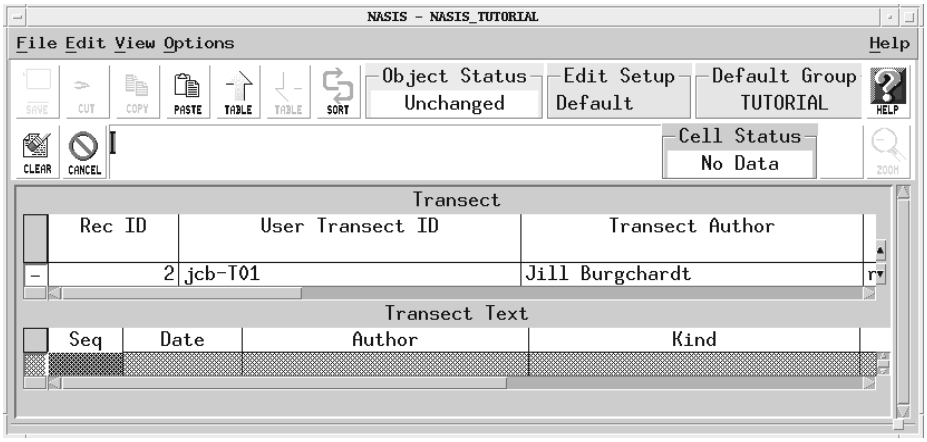


Note: Site observations occurred in three successive years. In only one of those years, 1998, was the observation part of a transect. The Site Association table does not allow you to distinguish which observation was part of a transect. Transects are recorded in the transect tables, and the individual transect stops are recorded in the pedon table.

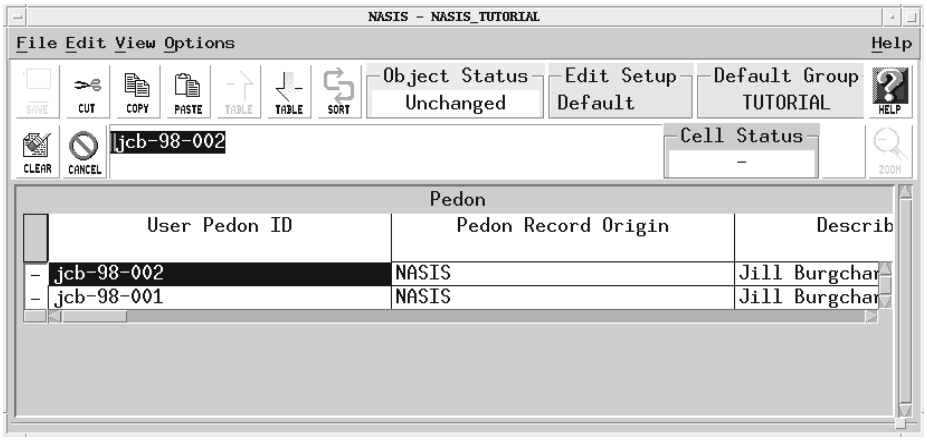
Examining the Transect tables

An overall description of the transect grouping (kind, selection method, delineation size, direction) is defined in the transect table. The Transect text table allows entry of related notes.

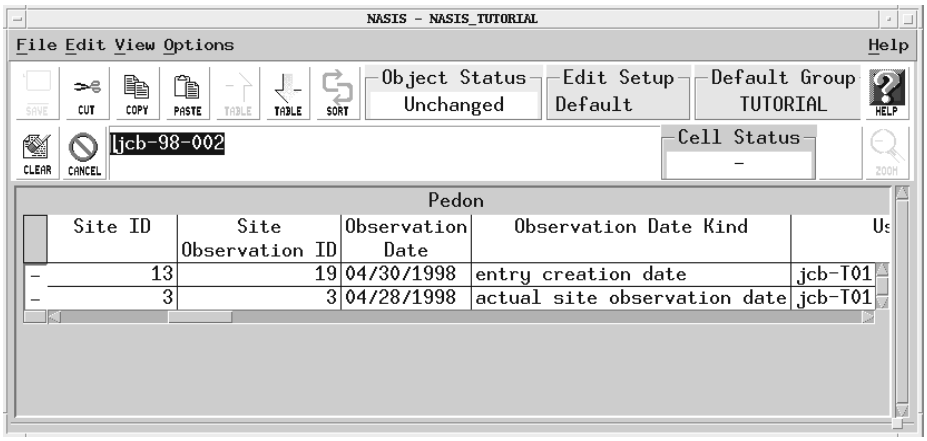
1. On the **View** menu, click **Transects**, then **Transect Text** to view both the Transect and Transect Text tables.



2. Use the Help button to view descriptions for the table columns.
3. With the cursor positioned in the **Transect** table, click **View** menu, then click **Find Related**.
4. Choose **Pedon** from the related item list.



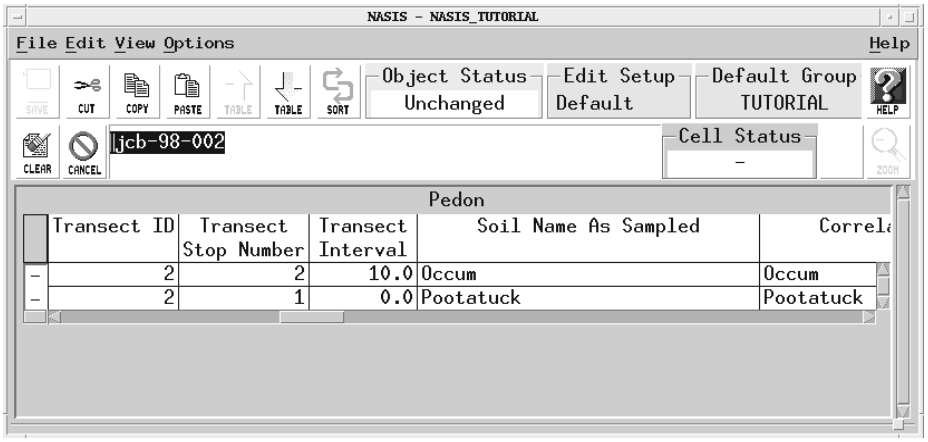
5. Scroll to the right until the **Site ID** column shows.



Note: The Site ID and the Site Observation ID are both shown. Although Site

ID 3 has three observations, only the 1998 observation is listed. Had there been two observations on April 28, 1998, they would have unique Site Observation ID numbers.

6. Scroll further to the right until the **Transect ID** column shows.



Note: Two transect stops have been defined for Transect ID 2.

You have now completed Chapter 18. In Chapter 19 you will add another site and link it to the Site Association table.