

**68B: Monadnock and Berkshire soils, 3 to 8 percent slopes**

The Monadnock component makes up 45 percent of the map unit. Slopes are 3 to 8 percent. This component is on hills on glaciated uplands, mountains on glaciated uplands. The parent material consists of loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist over sandy and gravelly supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist. Depth to a root restrictive layer, strongly contrasting textural stratification, is 15 to 30 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 2s. This soil does not meet hydric criteria.

The Berkshire component makes up 40 percent of the map unit. Slopes are 3 to 8 percent. This component is on hills on glaciated uplands, mountains on glaciated uplands. The parent material consists of loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

|                                                 |                             |                                            |
|-------------------------------------------------|-----------------------------|--------------------------------------------|
| <b>Important farmland classification:</b> Prime | <b>Land capability:</b> 2 s | <b>Vermont Agricultural Value Group:</b> 3 |
|-------------------------------------------------|-----------------------------|--------------------------------------------|

**Vermont Residential Onsite Waste Disposal Group and Subgroup:** Ic

This unit is well suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natural Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. With moderate permeability and slopes less than 20 percent, there are few limitations.

| PHYSICAL and CHEMICAL PROPERTIES |            |                 |            |                    |                      |                      | EROSION FACTORS |     |   |
|----------------------------------|------------|-----------------|------------|--------------------|----------------------|----------------------|-----------------|-----|---|
| Soil name                        | Depth (In) | Typical texture | Clay (Pct) | Soil reaction (pH) | Permeability (In/Hr) | Organic matter (Pct) | Kw              | Kf  | T |
| Monadnock                        | 0-7        | FSL             | 1-10       | 3.5 - 7.0          | 0.1-14               | 2.0-10               | .32             | .32 | 3 |
|                                  | 7-9        | FSL             | 1-10       | 3.5 - 6.0          | 0.1-14               | 2.0-10               | .32             | .32 |   |
|                                  | 9-19       | GR-FSL          | 1-10       | 3.5 - 6.0          | 0.1-14               | 1.0-6.0              | .24             | .43 |   |
|                                  | 19-22      | GR-FSL          | 1-10       | 3.5 - 6.0          | 0.1-14               | 0.0-2.0              | .24             | .43 |   |
|                                  | 22-42      | GR-LS           | 0-1        | 3.5 - 6.0          | 1-100                | 0.0-1.0              | .17             | .32 |   |
|                                  | 42-65      | GR-LS           | 0-1        | 3.5 - 6.0          | 1-100                | 0.0-1.0              | .17             | .32 |   |
| Berkshire                        | 0-7        | FSL             | 1-10       | 3.5 - 7.0          | 0.1-14               | 2.0-10               | .32             | .32 | 5 |
|                                  | 7-13       | FSL             | 1-10       | 3.5 - 6.0          | 0.1-14               | 2.0-10               | .32             | .32 |   |
|                                  | 13-21      | FSL             | 1-10       | 3.5 - 6.0          | 0.1-14               | 1.0-6.0              | .43             | .43 |   |
|                                  | 21-28      | FSL             | 1-10       | 3.5 - 6.0          | 0.1-14               | 0.0-3.0              | .49             | .49 |   |
|                                  | 28-33      | FSL             | 1-10       | 3.5 - 6.0          | 0.1-14               | 0.0-2.0              | .49             | .49 |   |
|                                  | 33-65      | FSL             | 1-10       | 3.5 - 6.0          | 0.1-14               | 0.0-1.0              | .55             | .55 |   |

| WATER FEATURES |                  |                                           |           |          |           | SOIL FEATURES |              |                                    |
|----------------|------------------|-------------------------------------------|-----------|----------|-----------|---------------|--------------|------------------------------------|
| Soil name      | Hydrologic group | Depth to seasonal high water table (Feet) | Flooding  |          | Ponding   |               | Hydric soil? | Depth to bedrock (range in inches) |
|                |                  |                                           | Frequency | Duration | Frequency | Duration      |              |                                    |
| Monadnock      | B                | ---                                       | None      |          | None      |               | No           |                                    |
| Berkshire      | B                | ---                                       | None      |          | None      |               | No           |                                    |

| LAND USE LIMITATIONS |                           |                  |           | AGRICULTURAL YIELD DATA |              |
|----------------------|---------------------------|------------------|-----------|-------------------------|--------------|
| Soil name            | Land use                  | Rating           | Reason ** | Crop name               | Yield / acre |
| Monadnock            | Dwellings with basements: | Not limited      |           | Corn silage             | 18 Tons      |
| Berkshire            | Dwellings with basements: | Not limited      |           | Grass-clover            | 6.6 AUM      |
| Monadnock            | Pond reservoir areas:     | Very limited     | Seepage   | Grass-legume hay        | 4 Tons       |
| Berkshire            | Pond reservoir areas:     | Somewhat limited | Seepage   |                         |              |

## Soil Fact Sheet - Continued

Windsor County, Vermont

### WOODLAND MANAGEMENT

| Soil name | Management concern         | Rating      | Reason | Vermont natural communities                                                                                                                            |
|-----------|----------------------------|-------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monadnock | Harvest equip operability: | Well suited |        | Northern Hardwood Forest,<br>Mesic Red Oak-Northern Hardwood Forest,<br>Beech-Red Maple-Hemlock-Northern Hardwood<br>Forest Variant,<br>Hemlock Forest |
| Berkshire | Harvest equip operability: | Well suited |        |                                                                                                                                                        |
| Monadnock | Road suitability:          | Well suited |        |                                                                                                                                                        |
| Berkshire | Road suitability:          | Well suited |        |                                                                                                                                                        |
| Monadnock | Erosion hazard (off-road): | Slight      |        |                                                                                                                                                        |
| Berkshire | Erosion hazard (off-road): | Slight      |        |                                                                                                                                                        |