

**56E: Monadnock fine sandy loam, 25 to 50 percent slopes, very stony**

The Monadnock, very stony component makes up 78 percent of the map unit. Slopes are 25 to 50 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 18 to 36 inches (depth from the mineral surface is 17 to 31 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 85 percent. Below this thin organic horizon the organic matter content is about 2 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

**Important farmland classification:** NPSL

**Land capability:** 7 s

**Vermont Agricultural Value Group:** 11

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

This unit is moderately 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. Slopes greater than 20 percent are the primary concern. Cut and fill site modifications may produce an acceptable area within the unit. An erosion prevention and sediment control plan is required by the State for construction on sites over 20 percent slope.

| 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, very stony            | 0-3        | MPM             | ---        | 3.5 - 5.5          | 1-14                 | 35-95                | ---             | --- | 3 |
|                                  | 3-8        | FSL             | 1-10       | 3.5 - 6.0          | 0.1-14               | 1.0-4.0              | .37             | .37 |   |
|                                  | 8-10       | FSL             | 1-10       | 3.5 - 6.0          | 0.1-14               | 2.0-20               | .32             | .32 |   |
|                                  | 10-12      | FSL             | 1-10       | 3.5 - 6.0          | 0.1-14               | 2.0-10               | .32             | .32 |   |
|                                  | 12-22      | GR-FSL          | 1-10       | 3.5 - 6.0          | 0.1-14               | 1.0-6.0              | .24             | .43 |   |
|                                  | 22-25      | GR-FSL          | 1-10       | 3.5 - 6.0          | 0.1-14               | 0.0-2.0              | .24             | .43 |   |
|                                  | 25-45      | GR-LS           | 0-1        | 3.5 - 6.0          | 1-100                | 0.0-1.0              | .17             | .32 |   |
|                                  | 45-65      | GR-LS           | 0-1        | 3.5 - 6.0          | 1-100                | 0.0-1.0              | .17             | .32 |   |
|                                  |            |                 |            |                    |                      |                      |                 |     |   |

| 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, very stony | B                | ---                                       | None      |          | None      |               | No           |                                    |

| LAND USE LIMITATIONS  |                           |              |           | AGRICULTURAL YIELD DATA |              |
|-----------------------|---------------------------|--------------|-----------|-------------------------|--------------|
| Soil name             | Land use                  | Rating       | Reason ** | Crop name               | Yield / acre |
| Monadnock, very stony | Dwellings with basements: | Very limited | Slope     |                         |              |
| Monadnock, very stony | Pond reservoir areas:     | Very limited | Slope     |                         |              |

| WOODLAND MANAGEMENT |                            |               |                   |                                                                                                                                            |
|---------------------|----------------------------|---------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Soil name           | Management concern         | Rating        | Reason            | Vermont natural communities                                                                                                                |
| Monadnock           | Harvest equip operability: | Poorly suited | Slope             | Northern Hardwood Forest, Mesic Red Oak-Northern Hardwood Forest, Beech-Red Maple-Hemlock-Northern Hardwood Forest Variant, Hemlock Forest |
| Monadnock           | Road suitability:          | Poorly suited | Slope             |                                                                                                                                            |
| Monadnock           | Erosion hazard (off-road): | Severe        | Slope/erodibility |                                                                                                                                            |