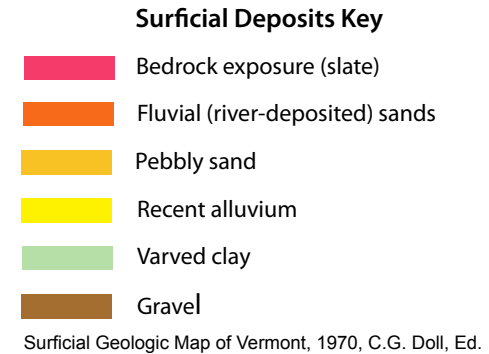
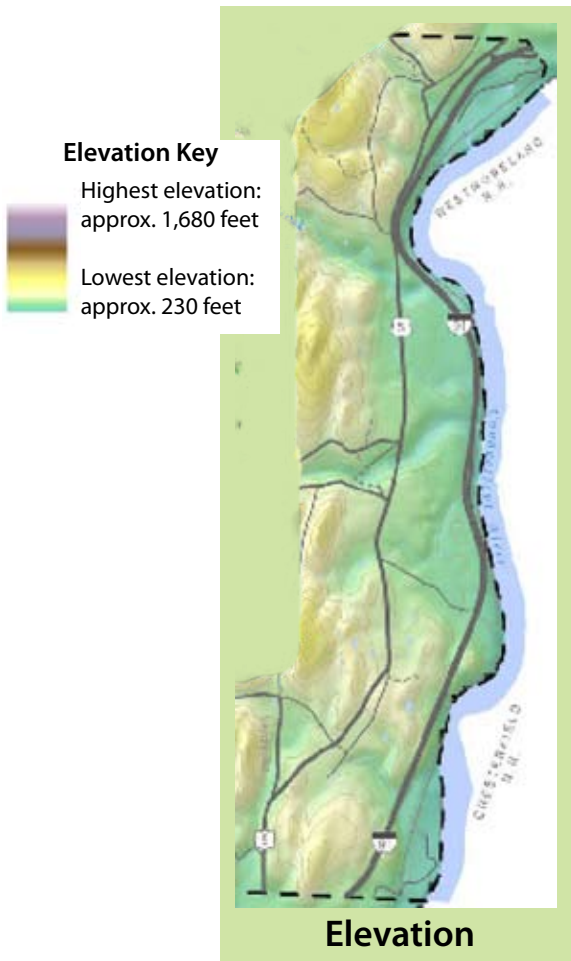


CONNECTICUT VALLEY SECTION



The gravel pits off Carpenter Road record the dynamic depositional environments associated with glacial Lake Hitchcock.

Landscape Level Elements

ENDURING FEATURES


This section, bounded on the east by the Connecticut River, is the lowest and least hilly part of town. The elevation of the river here is about 230 feet above sea level. As a result of its proximity to the river, and its post-glacial history, this is the section with the best agricultural soils and many alluvial deposits.


The banks of the Connecticut are steep in Dummerston. There are only a few areas next to the river where floodplain exists—at the far south and the far north.

Glacial Lake Hitchcock once flooded this valley to an elevation of 370 feet, and thus water covered most of this area after the glacier receded. This history is recorded in the lakeshore sands, clays from

the former lake bottom, and the gravels deposited in deltas where streams emptied into the lake. Where Canoe Brook flows into the Connecticut, it cuts through varved clay deposits. The “varves” are layers that show the annual deposits of silt on the former lake bottom.



 Areas at least 600 feet from a structure

 Important connecting habitat

Canoe Brook corridor



CONTIGUOUS HABITAT AND CONNECTING LANDS

While large portions of this section are “undeveloped,” much of that land is under cultivation, and forest occurs in small blocks and strips. Furthermore, this zone is sandwiched between Route 5 and I-91 and the railroad tracks, making this a dangerous area for animals to move into or out of, and unsuitable as habitat for any species that require remote forest. The mix of agricultural lands, edge habitat, forest, and riparian areas make this zone suitable for species that tolerate (or thrive on) human disturbance, such as red foxes, raccoons, skunks, and any possums that have enough sense to stay off the roads. Deer also thrive in this area, and many deer tracks were recorded on a walk along the railroad tracks.

The frontage along the Connecticut River provides a north-south corridor for aquatic and semi-aquatic species like mink, otter, and beavers. The one important connection to lands to the west is along Canoe Brook where it empties into the Connecticut. Four small areas are conserved: the Putney (in Dummerston) and Dummerston boat landings are State property; Sweet Tree Farm, conserved by the Vermont Land Trust; and Dutton Pines State Park.

COMPLEMENTARY LANDSCAPE

The southeastern corner of Dummerston has been designated a “Complementary Landscape” by the Vermont Biodiversity Project. This area has a combination of enduring features that are not found on land that has been conserved elsewhere in Vermont. The Vermont Nongame and Natural Heritage Program recommends making these areas priorities for conservation.

Community Level Elements

NATURAL COMMUNITIES

While this section is the most impacted by development, its soils, topography, and proximity to the Connecticut River allow small patch communities to occur here that are not found elsewhere in town. Among these are two examples of Silver Maple-Ostrich Fern-Riverine Forest. These forests are considered significant by the Vermont Heritage program and have a designation of S3 (uncommon, vulnerable in Vermont). These small patch forests host species adapted to survive in a tumultuous zone with fluctuating water levels and scouring ice. The northernmost of these, adjacent to the Putney Landing has the only known Dummerston occurrence of hackberry (*Celtis occidentalis*), a tree in the elm family. The southernmost is being infiltrated by invasive plants.

Majestic floodplain forests were once common along the Connecticut River. Because they occupied the best agricultural soils, they are now reduced to tiny remnants. Dummerston might consider setting aside additional rivershore areas for the re-establishment of riparian forests.

WETLANDS

The most significant wetland complex in this section is found along the streams in Kathan meadows, the large area of floodplain agricultural land along Kathan Meadows Road, the road that goes to the Dummerston Landing. At the landing is an area of deciduous riparian forest.

Invasive plants have a secure roothold in these wetlands. Yellow flag iris, glossy buckthorn, and honeysuckle are prolific. This area still provides great habitat for shrubland birds, wetland birds, and other wildlife.

RIPARIAN AND AQUATIC HABITATS

The Connecticut River is classified as a Priority Aquatic Feature by the Vermont Biodiversity Project. The riparian areas have been degraded by proximity to the interstate and railroad tracks, and to some extent by agriculture, and invasive exotic plants.

VERNAL POOLS

Only three vernal pools have been documented in this section. This is in part because little survey work has been done here, and in part because there is not a great deal of forest land in this section. With well-drained surficial deposits covering much of this section, few depressions hold water long enough to support vernal pool amphibians.

Species Level Elements

RARE SPECIES

Two species in this section have been listed as threatened. Racemed milkwort, *Polygala polygama* and the fern, blunt-lobed woodsia, *Woodsia obtusa*, have been recorded along the river. Well-drained floodplain areas, such as the land off of Ferry Road at the south end of this section, and Kathan Meadows to the north, are ideal habitat for the state-listed Fowler's toad, *Bufo fowleri*, S1. While these toads have not yet been located in this area, they are found in a very similar area in Vernon, and have been recorded historically in White River Junction.

DEER WINTERING AREAS

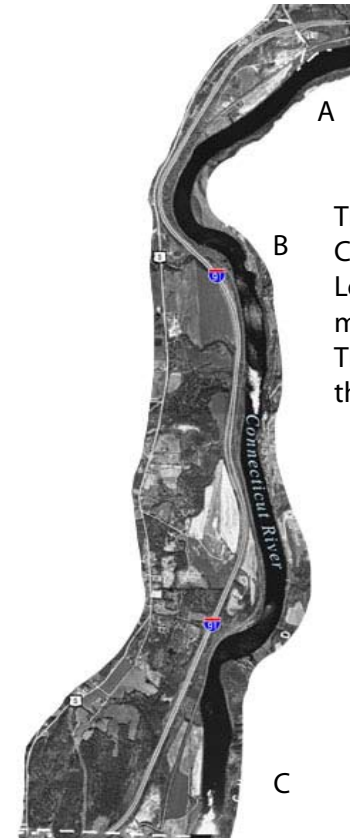
White-tailed deer have a well-developed trail network beneath the hemlocks in the Complementary Landscape mapped in the Landscape Level Elements discussion. This area is also included in the Agency of Natural Resources deer wintering area survey.

GRASSLAND AND BIRD HABITAT

Although this area has extensive open land, we are not aware of grasslands in this area that are managed in a way that would be compatible with nesting success of grassland birds.

EARLY SUCCESSIONAL AND SHRUB HABITAT

Shrub habitat is found in a few places in the areas of wetland and riparian forest. Many of the shrubs that grow in this low section of town are invasive exotics, and their value as habitat is thought to be less than that of native shrubs. Though considered degraded, this habitat still provides important cover and nesting sites.



Three areas have Community and Species Level Elements that merit special attention. These are examined on the next two pages.

Area A



4 Rare Plant Site



Silver Maple-sensitive Fern Riverine Floodplain Forest

1

Putney Landing

Silver maple-ostrich fern riverine floodplain forest (S3)
 Only record of hackberry in Dummerston
 Few invasives, excellent small example of this community type

2

Kathan Meadows

Prime agricultural soils, under cultivation. Possible Fowler's toad habitat.

3

Dummerston Landing Communities

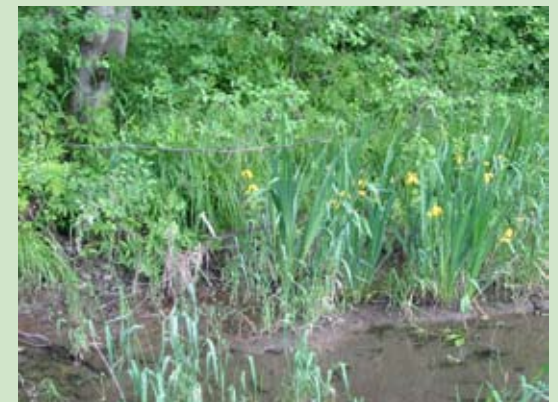
Silver maple-sensitive fern floodplain forest.
 Wetland complex includes

Invasive plants include yellow flag iris, glossy buckthorn, and honeysuckle.

- Shrubland bird habitat
- Wetland bird habitat
- Mammals that use this habitat include mink, fox, bobcat, raccoon, deer, muskrat, and beavers.
- Bats, swallows, kingfishers, osprey, and eagles can be seen over the river.
- Potential Fowler's toad habitat

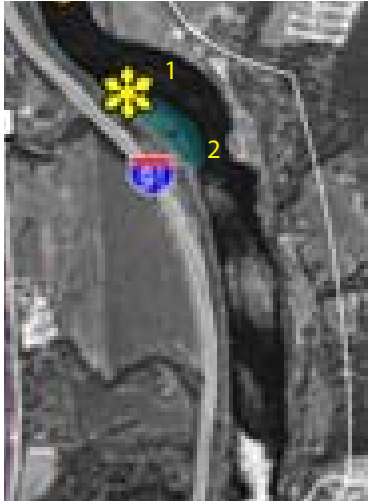


Dummerston Landing



Yellow Flag Iris in Wetland Complex

Area B



1

Rare Plant Site

2

Riverbend Forest

Silver maple-ostrich fern riverine floodplain forest (S3)
A weedy example, buckthorn and shrub honeysuckles abundant
Shrub habitat

Area C



Complementary Landscape



Vernal Pools



Deer wintering area



Old Ferry Road

One of the two level sites in Dummerston directly adjacent to the river. A section of this property might be designated for restoration of floodplain forest.