

## Larrabee Farm:

### *Blueberry Fields and Woodlands Preserved through Conservation Design*

by Randall Arendt

*Location:* Woodside Road, Brunswick, Maine

*Developers:* Steven Tibbets and Leonard Westra at Sun House Building and Design, Brunswick Maine; and Peter Bass at Vega Properties, Portland Maine

*Site Designer:* Steven Tibbetts, PE, Sun House Building and Design, Brunswick, Maine

*Engineer:* Tidewater Planning and Design, Brunswick, Maine

*Date:* 1988- 1996?

The first rural open space development in Brunswick Maine (population 20,645) was designed in 1988 around a 15-acre field of blueberries, with fifteen lots framing it on three sides. Of the 54 acres on the property, 35 (or nearly two-thirds) have been permanently preserved, half in field and half in forest. At the time it was proposed, the property was in a zoning district requiring lots to be two acres or larger. In the final layout, lots range from a bit less than one acre to nearly two acres, with most of them under 1.2 acres. All are served by individual wells and on-lot septic systems, on this generally sandy site with excellent drainage. Although the property had been zoned for 25 two-acre lots, the developers calculated they could earn a comparable return, and more quickly, if they limited the project to 15 lots, each with very attractive views producing premium prices. In addition, architectural standards were adopted for each lot. This “limited development” approach recognizes the economic value of quality over quantity.



**Figure 1.** The layout not only preserves two-thirds of the land, but also protects rural character by maintaining all of the Woodside Road frontage (at the bottom of the photo) as open space. A wooded buffer behind the homes at

the back (top) protects Great Gully Brook, which runs along the rear property line. Lots and houses were sited to maximize solar gain.

Views of the blueberry fields from Woodside Road are broad and sweeping, with all of the development's 2,150 feet of frontage on Woodside remaining open. Most of the homes face not only toward the central open space, but also toward Woodside road. Only two lots face away from Woodside, but they are set back behind 600 feet of blueberry fields, so their back yards remain fairly private. A broad strip of conservation land, varying in depth from 100 to 200 feet, wraps around behind the lots on the facing Larrabee Farm Road, providing a wooded buffer to the Great Gully Brook that runs along the back edge of the property. s

Three lots are served by a common drive from Woodside, and the remaining twelve lots are accessed by Larrabee Farm Road, a town-maintained street curving in a gentle arc around the central blueberry field, with underground utilities to maintain the site's rural character. 1,100 of its 1,700 feet are "single-loaded", meaning that about two-thirds of its length is bordered by open space, adding to the rural ambience of this residential enclave. Its 18-foot paved width is appropriately scaled for the low level of traffic generated by the dozen homes, and the "hammerhead" terminus provides an adequate area for three-point turns (in *lieu* of a suburban cul-de-sac circle). Undergrounding the electric and telephone wires also contributes to the neighborhood's attractive appearance, but if a row of deciduous shade trees (such as native red maples) had been planted at say 35-foot intervals along one side of the new street, views of the homes from Woodside would have been buffered a bit, without significantly blocking field view from the homes.



**Figures 2 and 3.** Larrabee Farm Road, accessing eleven lots, has a rural design standard with 18 feet of pavement width, and drainage swales to capture and infiltrate the stormwater into the underlying sandy soil. The picture at right shows the 600-foot deep blueberry field, with homes facing forward toward Woodside Road, from where the photo was taken.

The design of Larrabee Farm followed the principles espoused by the Mainewatch Institute, a nonprofit whose mission is to plan sustainability to protect natural ecosystems, and to reduce the conflict between development and the environment. Its layout is consistent with the Institute's publication *Green Development: Balancing Development with Conservation* by Alison Truesdale and Brian Kent. Among the other influences was Ian McHarg's seminal volume *Design with Nature*. Tibbetts, who trained as an environmental engineer and worked initially as a hydrologist, wanted to design a solar-oriented neighborhood that respected the environment. To the project he brought additional skills in house design and construction.

Interestingly, this project intuitively follows the “four-step design approach” first described eight years later in the Island Press book *Conservation Design for Subdivisions* (Arendt, 1996). In that approach, conservation lands are identified and designed around as the first step, followed by house locations, street and trail alignments, and finally by lot lines. The best results cannot be attained unless the conservation lands become driving force and constitute the central organizing design principle, around which the development is subordinately situated.

The permanent conservation easement held by the Brunswick-Topsham Land Trust (BTLT), as required by the town’s subdivision regulations, allows noncommercial agriculture but does not require that the blueberry fields be kept open or maintained. However, the homeowner association mows the fields annually, usually in late autumn, after the milkweed -- so critical to the Monarch butterfly lifecycle -- has matured. It also cuts and removes invasive trees such as honey-locust, birch, and white pine, primarily to preserve the long views that add enjoyment and value to each home. Although 34,000 pounds of blueberries were hand-harvested on the property as late as the late 1980s, maintaining productivity would have required annual prescribed burns, an idea not popular with the new homeowners. Berries still appear and ripen on many of the low, native bushes, but are harvested only informally and for home use.

There is a very informal footpath (possibly created by deer and other wildlife on the property, such as turkeys and foxes) running through part of the woodlands preserve, roughly paralleling the brook at the top of the slope. However, it is not used on any regular basis by the residents, who have access to two very fine and more extensive trail systems on land preserves within a mile of the property, on one land owned by BTLT, the other being a town-owned parcel.



**Figure 4:** Sweeping views across the preserved blueberry fields from Woodside Road, with homes bordering the conservation land. (Steven Tibbetts photo)