



**Application for
Amendment to the
Town Plan of
Conservation and
Development**

TOWN PLANNING AND ZONING COMMISSION

Michael P Davis _____ 414-218-8806 _____
Name of Applicant **Phone #**

998 Lake View Road, Washington Island, WI 54246 _____ mikedavisbwf@gmail.com _____
Applicant's Address **E-mail Address**

Are you the... Owner Optionee Buyer Agent Other

If other please explain: _____

Owner(s) of Record (If other than applicant) **Owner's Phone #**

Owner's Address **E-mail Address**

5T Birchwood Road/105 Birchwood Road _____ 7 acres/9 acres _____ AG/AA
Address of Parcel(s) involved (if any) **Size of Parcel(s)** **Zone of Parcel(s)**

Describe proposed change:

5T Birchwood Road from Open Space to Agriculture in Future Land Use Plan
 105 Birchwood Road from Low Density Residential to Agriculture in Future Land Use Plan

Applicable chapter(s) or section(s) of Town Plan of Conservation and Development:

Chapters 3-Natural Resources, 4-Open Space, 5-Agricultural Resources, 14-Future Land Use Plan

How will the change affect the Town's adopted Plan of Conservation and Development?

The change meets the aspirations and goals of the PCOD to maintain sufficient natural area and agriculture open space to preserve the Town's rural heritage and maintain the balanced life that its residents expect. Details are provided in the attached narrative.

(Feel free to attach any additional comments or pertinent information to describe this change)

Michael P Davis _____ March 4, 2024 _____
Applicant's Signature **Date**

Owner's Signature (if applicable) **Date**

Office Use Only*****

Fee \$ _____ Ck. No. _____ POCD Revision Date: _____ Comm. Action Date: _____

Michael P. Davis, Owner
Application to Town of Windsor Planning and Zoning Commission
Amendment to the Town Plan of Conservation and Development
March 4, 2024

Proposed change

5 Birchwood Road (7 acres) from Open Space to Agriculture in Future Land Use Plan (FLUP)
105 Birchwood Road (9 acres) from Low Density Residential to Agriculture in the FLUP

How will the change affect the Town's adopted Plan of Conservation and Development

Michael P. Davis¹, Ph.D. and Susan M. Buchanan², Master Urban Planning
1, 2 Bios - Appendix A

The change will align the Windsor Plan of Conservation and Development (POCD) with the Davis family's long-term plans to permanently preserve **5 and 105 Birchwood Road** (16 acres) as agricultural open space. It will also match the Agriculture designation in the FLUP for the adjoining Davis family farmsteads at **1 and 3 Birchwood Road** (7 acres). **All four properties collectively comprise the 23-acre Birchwood Farms (BWF)**. The common designation of all four parcels as Agriculture in the PCOD will enable its permanent preservation as agricultural open space, including qualification for support and funding by town, state, and nonprofit entities; stewardship and management of its important natural and agricultural resources; and its continued economic viability as a standalone Windsor farm. There are not many farmsteads still operating in what was once a rural agricultural town. This is an opportunity to preserve one and help maintain part of Windsor's rural heritage.



The FLUP change is the first step in a process and partnership we hope to undertake with the Town of Windsor to preserve Birchwood Farms as permanent agricultural open space (**Appendix B - Preservation of Birchwood Farms, Windsor, Connecticut**).

This effort with BWF can also serve as a catalyst for what may be a one-time opportunity in carrying out the POCD goals of preserving substantial at-risk, unprotected managed open space on the Northwest side of Rainbow Reservoir (Farmington River) that is designated as Open Space and Agriculture.

View to NW from 5 Birchwood of 1 Birchwood, a farmstead location since at least the 1890s (Talbot family)
(all photos by and at Birchwood Farms, unless noted)

An estimated 500 acres of managed open space may be lost to residential development on our side of Rainbow Reservoir due to its current zoning unless BWF is permanently protected. The permanent protection of this area will complement the Town’s foresight in the permanent preservation of large tracts of open space on the southeast side of Rainbow Reservoir, including Northwest Park and the Town Landfill. Together, **permanent protection on both sides of Rainbow Reservoir will preserve an important large and contiguous area of over 1,000 acres** of Windsor’s natural and agricultural area open space heritage and rural character as envisioned in the POCD.

2015 TOWN OF WINDSOR PLAN OF CONSERVATION AND DEVELOPMENT FUTURE LAND USE PLAN – NORTHWEST WINDSOR



- Low Density Residential
- Medium Density Residential
- Warehouse
- Office
- Multi-Family Residential
- Mixed Use
- Business
- Utility
- Community Facility/Institution
- Open Space
- Industrial
- Agriculture
- Environmental Constraint

Descriptions of Future Land Use Categories

Natural Resources	
Environmental Constraint	Areas with significant environmental constraints that represent the highest priorities for conservation. (See Chapter 3 for more detail.)
Open Space	Areas that are currently preserved for open space purposes and areas that may not be preserved currently, but are desirable for future open space, as they make a significant contribution to Windsor's feeling of "openness". (See Open Space Preservation Plan on page 4-7 for more detail.)
Agriculture	Areas that are suitable for agricultural uses.

Residential Areas	
Low Density	Residential densities generally between 1.3 and 1.6 units per acre due to existing zoning, natural resources, infrastructure availability, or desirable patterns of development.
Medium Density	Residential densities generally greater than 1.6 units per acre due to existing zoning, natural resources, infrastructure availability, or desirable patterns of development.



OJ Thrall Tobacco, Windsor (2019) - Mike Davis

Agriculture and the open space associated with it has been a key part of Windsor’s economy and way of life since its founding as Connecticut’s first town. Windsor is losing its rural agricultural heritage and balanced community character, due to substantial commercial and residential development. That has resulted in a significant decline in agricultural and natural area open space. Much of what remains is unprotected managed open space at risk of development.

Open space preservation in lieu of new market-rate residential construction can be cost effective despite generating little or no taxes. Published studies have determined that open space can have a long-term positive effect on the Town’s tax structure. New residential construction adds to the demand for education and general services, while not always generating enough property taxes to offset its demand. Studies have also shown that property values decrease with distance from open space and more particularly, recreational facilities such as parks and trails. (NOTE - italicized text in this narrative is from the 2015 Windsor POCD)

Residential development of BWF is not cost effective for Windsor. It would further skew the town away from its POCD goal to maintain sufficient natural area and agricultural open space to preserve the Town’s heritage and maintain the balanced life that its residents expect, with places to live, work, shop, and adequate open space, including farms and natural areas to enjoy as part of that life.



Potential 5 Home Subdivision of 105 Birchwood Road Alford Associates Inc. August 30, 2010



With Birchwood Brook and its associated wetlands traversing BWF, that portion is self-preserving. MDC sewer and water lines installed on Birchwood Road were intended only to serve homes by Rainbow Reservoir, and are not available for BWF, which was exempted from a water & sewer assessment. However, the two subject properties could be residentially developed, with 7 potential new single-family homes.

105 Birchwood Road (AA, 9 acres) – 5 residences - Alford Associates Inc. August 30, 2010
3 Birchwood Road (AG, 7 acres) – 2 residences per zoning

Residential development is not a fit for this prime and statewide important farmland with its diverse and important natural resources that would be permanently and negatively impacted by development.

BWF is a diverse and productive ecosystem of actively farmed land and important natural areas and resources. **Designation of all its land as Agriculture meets the goals and priorities of:**

Chapter 3 – Conserve Natural Resources

Chapter 4 – Preserve Open Space

Chapter 5 – Agricultural Resources

Chapter 14 – Future Land Use Plan, with consistency with state and regional plans of conservation and development.



Rainbow Reservoir - BWF Shore



The “Swamp” - Northend



The “Swamp” – Mid to Southend

BWF, in addition to the 23 acres owned by the **Davis family**, also **has deeded access rights from its property to pass and repass to the Farmington River (the River) on the eastern 4 acres of the original farmstead property along Rainbow Reservoir** sold by Simon Waicunas to the Farmington River Power Company in 1929 (Vol 99 Page 540). With its access rights, BWF impacts this area and thus it has remained **part of its total 27-acre ecosystem**, as it has been since the farmstead was established.

This unique ecosystem includes both the riparian habitat along the River and the **“Swamp,”** a **meander cutoff body of water** that was connected to the River on its former north end until a portion

was filled in by Camp Marlin (Camp Shalom predecessor) prior to watercourse and wetland protections. Instead, a channel from what the Davis family has called the “Swamp” since its purchase of the farmstead in 1938, connects it to the River on its north end.



Pumpkinseed



Bluegill



Largemouth Bass



Water flows in and out of the swamp with the raising and lowering of Rainbow Reservoir, along with fish and other fauna and flora, some of which also breed in the Swamp. This is important to the River watershed, since breeding success is more difficult in the main reservoir, with its currents, and rising and lowering waters, that often do not provide suitable breeding areas.

Brown Bullhead

Chapter 3 – Conserve Natural Resources

Windsor is home to landscapes that provide scenic and ecological value. Windsor’s forested wetlands, bogs, floodplains, grasslands, upland areas, and water bodies not only provide important ecological functions, but also help protect our health and safety, offer recreational opportunities, and contribute to community character. Residents are proud of the natural treasures that are in or run through Windsor, including two of the State’s most important rivers – the Connecticut and Farmington Rivers.



BWF with its diverse natural and agricultural open space, is a unique ecosystem that is representative of many of the natural resources treasured by residents – wetlands, bogs, floodplains, grasslands, upland areas, and water bodies, including Birchwood Brook and its associated wetlands, a vernal pool (aka Tadpole Pond) and the Swamp by the River, of critical importance to breeding amphibians, reptiles, fish, and other fauna and flora. It’s a key Wildlife Corridor and Greenway along the Farmington River and home to numerous common flora and fauna, along with threatened and species of concern.

Protection of Birchwood Farms meets the major Natural Resources goals of the POCD.

Protect Important Natural Resources
Conserve Biological Corridors and Sensitive Habitat
Protect Water Resources and Water Quality
Protect Groundwater Quality
Reduce Greenhouse Emissions

It's permanent preservation and that of other managed properties on the northwest side of Rainbow Reservoir compliments and adds to the protected open space on both sides of Rainbow Reservoir, including the Town's open space jewel, Northwest Park.

Open Space Preservation (Chapter 4)

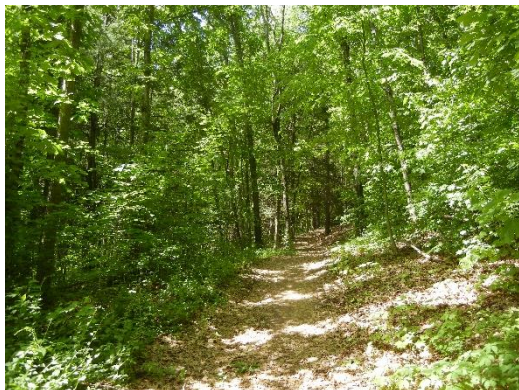
Agricultural Resources (Chapter 5)

BWF is a unique and ecologically diverse natural and agricultural open space, meeting many of the goals, priorities, and benefits for both making it an overall higher value and priority to conserve than if all its acreage were farmland or natural area, with little diversity.

Appropriately located open space of sufficient size and quality to be meaningful, help protect community character, conserve important natural resources, shape development patterns, and enhance the quality of life for Windsor residents.

Access & Recreation

Like the natural features that define them, the desired level of access to open space can help determine its appropriate ownership and use.



Trail from upland BWF to the River

BWF as an active agricultural open space business, will provide public access as part of its agricultural product and tourism business plans. Plans include the seasonal sales of cut your own Christmas trees with a Christmas shop for value added products; pick your own crops; other field crops; and high tunnels and greenhouses for plant and crop production. Passive recreational opportunities will be part of these on farm business activities, providing scenic vistas, access on hiking trails through wildlife habitat and corridors, and access to the Farmington River watershed.

Environmental Benefits

Open space can be used to protect fragile ecosystems, erodible slopes, and wildlife habitats, as well as surface and groundwater resources. It can also be used to provide wildlife corridors linking habitats and providing relief from the heat island effect and visual impacts of suburban development.

Presence of an unprotected recreational resource

BWF, as a unique agricultural open space preserve and farm business as described in access and recreation, is an unprotected recreation resource that would be lost if developed.

Wildlife/greenway/trail corridor

An isolated parcel of open space may preserve an important natural resource or maintain the appearance of undeveloped land, but it may not contribute to a meaningful open space system. If that same parcel of open space can be interconnected into a cohesive system, its value to residents and impact on the community grows significantly. Such open spaces can be connected by trails, providing increased accessibility, significant functional wildlife corridors, more opportunities for active or passive recreation, and enhanced quality of life for residents.



Farmington River Wildlife Corridor Eversource Power Line Wildlife Corridor Connects to RBD Lands to South

BWF is an environmentally significant and important wildlife corridor as part of the Farmington River watershed, with wildlife moving along the shoreland and across the River year-round, in and over the water or across the ice to Northwest Park. To the west, the north/south Eversource power line right of way across BWF is another important wildlife corridor. Together they form a key wildlife corridor that connects large areas of land, much currently undeveloped in Northwest Windsor, on both sides of Rainbow Reservoir. **Residential development of BWF would disrupt and diminish its value as a key part of that wildlife corridor and greenway that cannot be recreated.**





Red fox

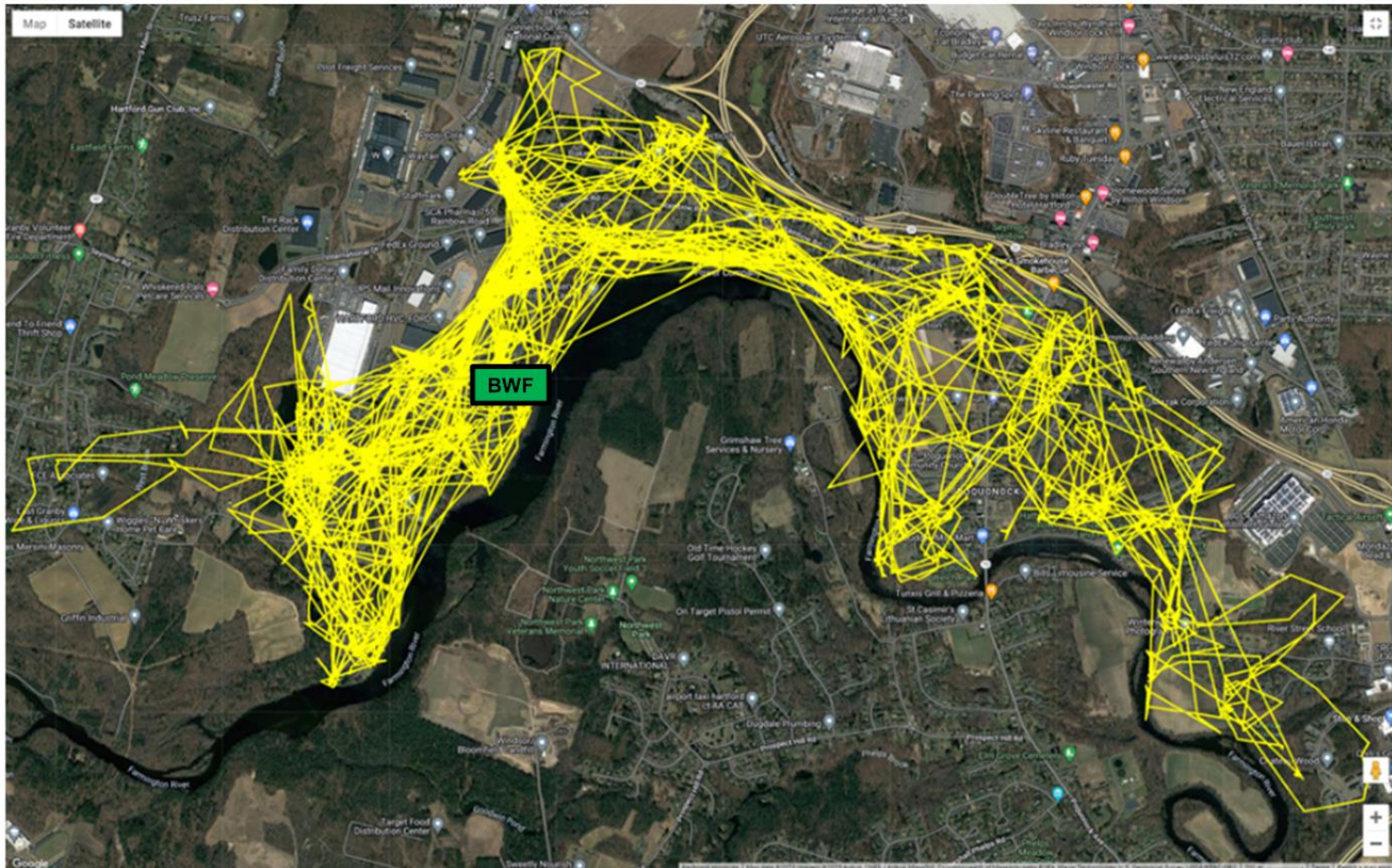


American beaver's Handiwork



Eastern coyote

Numerous species, large and small traverse BWF, including bobcats, red fox, eastern coyotes (which we have observed crossing the River ice), black bear, white tailed deer, turkey, and American beavers. Year-round and migrating bats and birds utilize the wildlife corridor in their lives and travel, from tiny warblers to large raptors, including red tailed hawks and bald eagles. BWF is an intact environmentally important greenway corridor with its trails connecting to a portion of the River watershed area.



Birchwood Farms is a participant in the CT DEEP Wildlife Division Bobcat Project



February 4, 2024

The **CT DEEP Wildlife Division Bobcat Project** conducted a successful trapping and tranquilizing on BWF, with subsequent radio tracking in **December 2022**, of a female into 2023. Data from that bobcat clearly demonstrates the important wildlife corridor along the River on our side and BWF’s importance as a key component. The tracking map shows the west boundary of her territory, likely with that of another female bobcat.

Presence of special wildlife habitat

BWF’s diverse and interspersed environments provides an ideal overall ecosystem for a multitude of fauna and flora, common and rare, representing a broad and representative range of Windsor and Connecticut species. We have yet to complete a definitive survey of species, but what we learned over our lifetimes confirms our assessment.

In addition to **mammals** covered under wildlife corridors, other mammals include northern River otters and muskrats in the River watershed, grey and red squirrel, eastern and/or New England cottontail rabbit, Virginia opossum, striped skunk, eastern chipmunk, mice, moles, shrews, and voles.



Bald Eagle



Red-tail Hawk



Owl



Turkey Vulture

Many Connecticut **bird species** reside at or visit BWF in their feeding, mating, or migration travels. The **threatened Bald Eagle** soars over BWF and perches in its tall mature forest trees. As does the

American kestrel, a species of concern, along with red-tail, Cooper’s and other hawks; Eastern screech owl, great horned, and other owls; and turkey vultures, that have an overnight roost in the tall forest trees on 105 Birchwood.



Canada Geese



Heron

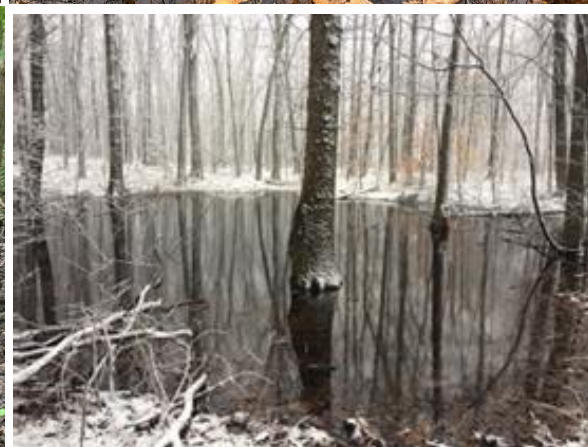


Migrating Ducks



Great Blue Heron

Tree and barn swallows, gold and other finches, sparrows, bluejays, cardinals, a myriad of warblers, wood thrush, bluebirds and the **brown thrasher, bobolink, and whip-poor-will, species of concern**; wrens, ducks, geese, herons, and shorebirds in the River watershed. **Common loons, a species of concern**, can be seen in their migrations resting on the River, a secluded area with BWF and other undeveloped open space on one side and Northwest Park on the other. A broad range of spring and fall migrating waterfowl species utilize the River and Swamp in their travels, along with nesting geese, wood, and mallard ducks.



A vernal pool, aka Tadpole Pond, on the 105 Birchwood parcel, is a productive intermittent pond - Windsor 2005 Natural Resources Inventory (Vernal Pool 7, Tier 1 quality)



Spotted salamander



Wood frog eggs



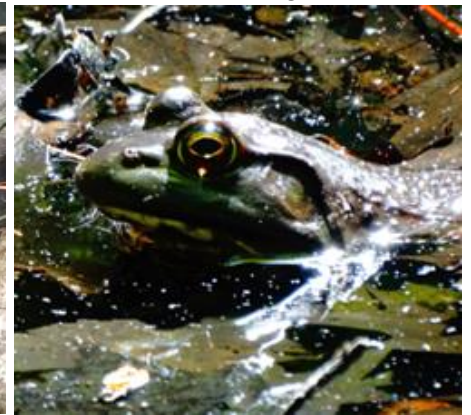
Wood frog



Wood frog tadpoles



Fowler's toad



Green frog

In most years Tadpole Pond has sufficient water before going dry in summer, for **successful wood frog, spotted salamander, and other fauna breeding**, and is a key to their continued presence as a species in the area. BWF is also home to other amphibians, including the Red-backed salamander, bullfrog, green frog, northern leopard and pickerel frogs, spring peeper, and Fowler's and American toads, with some of these species breeding in the **Swamp**.



Eastern box Turtle



Breeding snapping turtle



Painted turtle



Garter snake

Reptiles include **eastern box and wood turtles, both species of concern**, along with painted turtles and **common snapping turtles**, that enter the secluded Swamp in April to mate. The females climb the 60 feet+ incline from the Swamp into our fields in late May and early June, to lay their eggs in the warm, sandy loam soil. We cover the buried egg caches with raccoon barriers to prevent their destruction and give the hatchlings a chance to make the trek to the River and live over forty years.

Snakes include the **eastern hognose snake, a species of concern**, garter, water, black racers, and rat snakes.



Monarch Butterfly



Monarch Caterpillar



Sphinx Moth Caterpillar

Insects and **spiders** thrive on BWF in its diverse ecosystem of sustainable Christmas tree grasslands, other crop land, meadows, forests, wetlands, and watercourses. A diverse range of species, including bumble and other native bees; dragonflies, damselflies, beetles, flies, moths, and butterflies can be found on BWF. **Monarch butterflies**, declared endangered in 2022 by the International Union for Conservation of Nature, can be found on BWF. Management efforts are directed at enhancing butterfly habitat, including milkweed for monarchs.



Pink lady's slipper



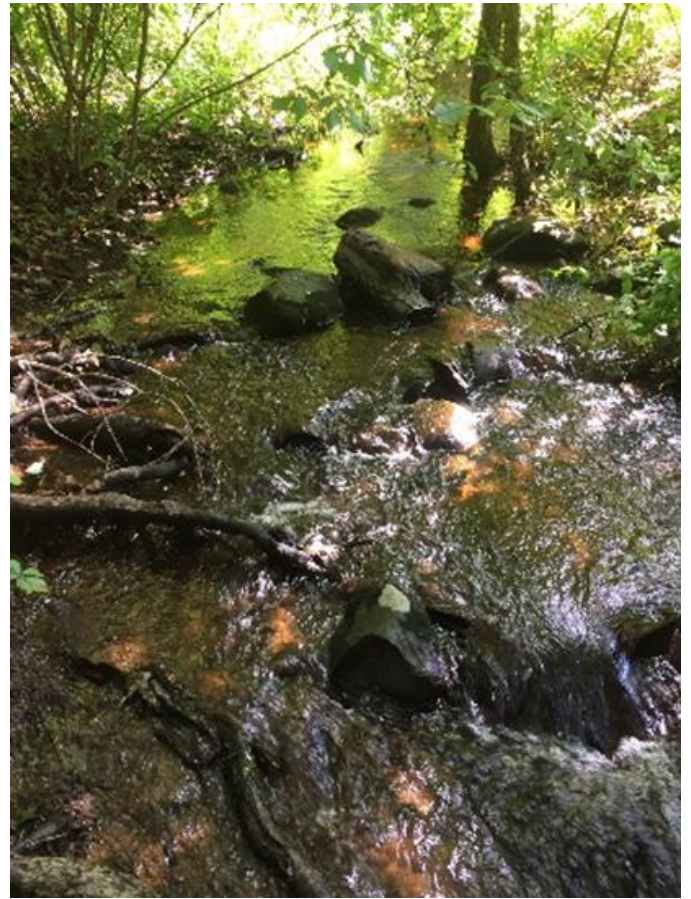
Pin cherry



Coprinus mushroom

BWF's diverse ecosystem is home to numerous uncatalogued **plant and fungi species**, adapted to its crop lands, grasslands, meadows, forests, wetlands, watercourses, and ponds. Dominate mature forest species are white oak, red oak, and white pine.

It is very likely that with its diverse ecosystem, BWF harbors other endangered, threatened, and species of concern, that will add to its value as preserved open space. We plan to continue efforts to survey BWF species.



Birchwood Brook crosses into BWF at the corner of Stone & Birchwood Roads, running through 1, 5, and 105 Birchwood, then underneath Birchwood Road, joining **West Brook** which empties into **the River**. **Associated woodland and meadow wetlands** combined with the brook, provide a unique, environmentally important, and endangered watercourse ecosystem. In my youth, the brook ran year-round, with native brook trout, other fish and aquatic fauna and flora. The creation of an irrigation pond upstream by Culbro Tobacco and Imperial Nurseries prior to the enactment of Connecticut wetland and watercourse laws ended its free-flowing days, and it became an intermittent stream. Birchwood Brook is still environmentally important, but not at the level when it ran year-round.



Swamp and its connection to Rainbow Reservoir



Water flowing into Swamp when water is raised.

The Swamp and River parts of the BWF ecosystem enhance each other's environmental importance, by their unique symbiotic relationship, with the River providing daily water exchanges and entry by fish, turtles, and other aquatic fauna and flora. The Swamp, with its surrounding woodland and wetland associated areas, are connected, but not subject to the harsh realities of a hydroelectric impoundment, that acts as both a large and fast flowing river, and a lake, with daily changes in its water level. Fauna and flora can more easily live and breed in the Swamp's tempered pond-like ecosystem, than in the Reservoir.

Location at a transition point between incompatible land uses or zones

Changing 105 Birchwood from Residential to Agriculture will maintain this land as a buffer and transition point between current residences and 93 acres of managed open space (Davis, FRPC, JCC properties). Its designation and use as Agriculture create a more appropriate transition point between AG and AA zoning and uses.



Presence of an historic/scenic resource or scenic views of these resources

Since at least the 1890s, over 130 years ago, there has been a farmstead at BWF, with upland for growing crops, a steep hill, with 60 feet+ drop to floodplain along the River, with the hill and floodplain once used for pasture. BWF is a historic resource with scenic views of the upland areas and views of the Swamp, the

River, and its floodplain, the later all undeveloped, including Northwest Park, across the River.

Quality of Life

Aside from the obvious recreational opportunities, many quality-of-life benefits of open space are intangible because it is difficult to place a price on community walkability, scenic beauty, biodiversity, or maintaining local sources of food.

Residential development of BWF will provide the potential new seven homeowners with a high quality of life with houses nestled in forests and fields bordering the Farmington River watershed and greenway, along with all the services and high quality of life that come with being a resident of Windsor.

Preservation of BWF as permanent agricultural open space will enhance the quality of life for most all of Windsor's residents in so many ways as covered in this narrative.

Proximity to existing open space

BWF's 23 acres adjoin 79 acres of managed open space (JCC, FRPC), a total of over 100 acres of contiguous land, is also north and east of almost 400 acres of managed open space (River Bend Development, others), and across the River from the over 600 acres of permanent open space owned by the Town (Northwest Park & Landfill). The total managed and permanent open space area on both sides of the River totals over 1,000 acres.

Prioritizing Open Space

Once the general location of desirable open space areas are identified and mapped, their acquisition must be prioritized to make the most of limited resources available for acquisition. Prioritization can be more challenging than identifying the desirable open space because many of the variables can be subjective.

Birchwood Farms meets many of the criteria identified as important in determining that a property is priority high quality open space, worthy of and appropriate for preservation with financial support from the Town of Windsor.

Prioritization is important, especially to national and state governments and nonprofit agencies, with limited resources spread over large geographic areas and the need to balance that distribution over those areas. Windsor benefits too from prioritization, but as a town with a much smaller area, that is rapidly losing its rural heritage, it cannot wait for its top priorities to become available. That may never happen for much of Windsor's unprotected managed open space, most of which is zoned residential or Agriculture. The economic incentives to landowners and developers to go forward with development may preclude permanent preservation efforts by the Town or any entity.

Windsor should go forward with opportunities as they arise if its involvement will preserve a property that meets priority criteria but may not be the top ranked parcels that may never be available. This is an opportunity now for permanent preservation of a rare standalone farmstead in Windsor, before it too is lost to development. Such opportunities and overall considerations add weight as an important overall priority in addition to a scoring that is based only on adding up individual criteria.

***Developability of the land** (i.e. is the land self-preserving by virtue of significant natural constraints) and if developable, the level of threat of imminent development.*

With Birchwood Brook and its associated wetlands and steep slopes, a portion of the property, is self-preserving. However, the majority of BWF can be residentially developed, with **7 potential new single-family homes**.

105 Birchwood Road (AA, 9 acres) – 5 residences (Alford Associates Inc. - 2010)

3 Birchwood Road (AG, 7 acres) – 2 residences per zoning



Part of BWF was subdivided in 1992, creating the current 1 Birchwood (3.4 acres) and 3 Birchwood (3.6 acres). The current owner of 1, 5, and 105 Birchwood is 70 years old. Circumstances, including that following generations may not have the passion or means to continue the current private family preservation effort, puts the property at risk of development in the near future.

Mike Davis & 1969 Farmall 656

Unique value of the recreational, natural, historic, or scenic resource it would protect (e.g. a critical link in a greenway/trail/wildlife corridor, a critical addition to an existing open space such as a parcel projecting into or adjacent to Northwest Park)

Many of these values for BWF are covered elsewhere. Again, an important overall priority is its key location adjoining substantial unprotected managed open space on the northwest side of Rainbow Reservoir (Farmington River) and across the Reservoir from substantial protected open space, including Northwest Park.

Current use of the land (e.g. actively farmed, a fallow field, a private recreation facility, public utility land, a wooded buffer between incompatible uses, etc.)

BWF is actively farmed, a private protector of its important natural resources, and a buffer between contiguous managed Open Space to its north (Camp Shalom) and west (Farmington River Power Company) and residential development on Birchwood and Hilltop Roads.

Containing fragile/rare natural resource, the potential for damage from nearby development

Covered elsewhere.

Fair distribution of open spaces throughout town

Most all of the Open Space and Agriculture land northwest of Rainbow Reservoir is managed, not permanently protected and could be lost to development. By working to permanently protect BWF and other managed open space in that area, the Town will help ensure fair distribution throughout Windsor.

Amount of money available locally for acquisition (i.e. you can't target large parcels without significant funds available) and the type of grant funds available.

Funding to permanently preserve BWF will not be substantial since it will not require the purchase of the properties by the Town or another entity. 1 and 5 Birchwood Road (AG), each with a house on 3+ acres, cannot be further subdivided under current zoning regulations. The Davis family plans to put both parcels in a Conservation Easement (CE) so that they cannot be further subdivided in the event that zoning regulations change. That will limit costs to ones associated with implementation.

The Davis family proposes (Appendix B) that 5 and 105 Birchwood (16 acres) be permanently protected through the Purchase of Developmental Rights (PDR), with the Town providing that funding through its Open Space Fund or another means, such as Transfer of Developmental Rights (TDR). The town will not hold the CE. That will be held by a nonprofit land trust.

A PDR will limit costs, since the cost is the difference between market value as land that can be developed and its value with a conservation easement that prevents any further subdivision. That amount is much lower than a property purchase. In addition, the land remains in private hands, and there are no ongoing costs to the Town, including property maintenance or ensuring CE compliance. BWF is in discussions with the Connecticut Farmland Trust to serve in that capacity.

Agricultural Benefits



Birchwood Farms Buckwheat



Birchwood Farms Field & Barn



Birchwood Farms High Tunnel

For most of its 382-year history, Windsor has been an agricultural community. Preserving our agricultural heritage helps to maintain community character and could provide needed land for sustainable, locally grown produce in the face of increasing energy and transportation costs. The diversity of our economy, long-term land stewardship, employment opportunities, the stability of family ownership, and preservation of wildlife habitat are just a few of the multitude of reasons that a healthy agricultural sector strengthens a community.

Preserving agricultural land will help to maintain local food capacity, economic diversity, as well as historic and community character. Most of Windsor's prime upland agricultural land, which is the most economically viable for farming, is not protected from development. This farming heritage and diversity, spread throughout the Town, is being permanently lost. This may leave the Connecticut and Farmington River floodplains, with their limitations due to periodic flooding, with the majority of Windsor's only remaining farmland.

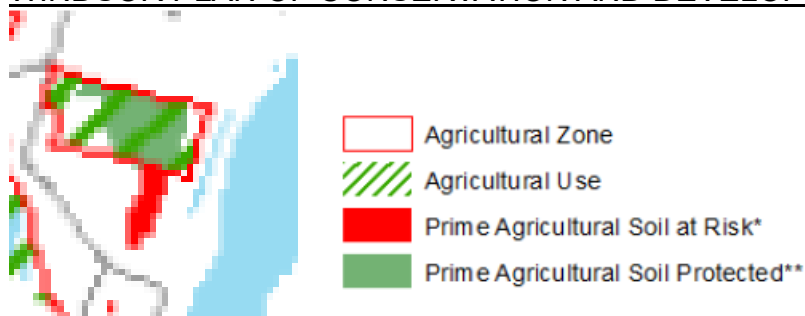
Permanent preservation of Birchwood Farms and other unprotected agricultural lands will help ensure that Windsor’s heritage will still be part of its farming heritage and diversity.



Preservation of Birchwood Farms will also meet a key goal of the POCD, **Preservation of Prime Soils for Agricultural Use. A substantial portion of BWF (42% est.) is “Prime farmland”** as defined by DEEP as “land that has the best combination of physical and chemical characteristics for producing food, feed, forage fiber, oilseed crops, and is also available for these uses” (i.e. undeveloped). **The remainder (58% est.) is “Additional farmland** of importance defined by DEEP as those that are nearly prime farmland that economically produce high yields of crops when treated and managed according to modern farming methods. These areas may produce as high a yield as prime farmlands under the right conditions.

BIRCHWOOD FARMS – 1, 3, 5, 105 Birchwood Road (23 Acres)

WINDSOR PLAN OF CONSERVATION AND DEVELOPMENT



*Vacant Parcel and Not in Agricultural Zone

**Currently Farmed and in Agricultural Zone; in Agricultural Zone; Dedicated Open Space

ESTIMATED FARMLAND & SOIL CLASSIFICATION – STATE OF CONNECTICUT – USDA NRCS)



42%	Prime Farmland	
82B	Broadbrook silt loam, 3 to 8 percent Slopes	
58%	Farmland of Statewide Importance	
36B	20%	Windsor loamy sand, 3 to 8 percent slopes
103	20%	Rippowam fine sandy loam
36A	12%	Windsor loamy sand, 0 to 3 percent slopes
82C	6%	Broadbrook silt loam, 8 to 15 percent slopes

100%

- All areas are prime farmland
- Farmland of statewide importance

The AG Zone was once but is no longer considered as a holding zone, to be rezoned for higher density residential development in the future. The AG zoning of prime agricultural soils, especially those that are being actively farmed, should be maintained to preserve some of Windsor’s local food capacity as well as its rich agricultural heritage in the most appropriate locations.

Residential development of 5 and 105 Birchwood Road with 7 homes will eliminate most all of this land as productive agricultural open space, with substantial negative impact on its unique natural ecosystems.

The best method of preserving prime farmland is through a program that purchases development rights from farmers that accomplishes four things:

- > the farms remain in private ownership and can be farmed in perpetuity*
- > the farmland can never be developed*
- > farmers receive an infusion of cash, eliminating the need to sell for development*
- > property taxes are permanently reduced.*

Town staff should collaborate with the Conservation Commission on the local purchase of development rights as part of the ongoing open space acquisition program.

Purchase of development rights (PDR) require less funding than land acquisition, and thus more land can be permanently preserved with available limited funding.



Broadleaf tobacco in former shade grown field **Malting barley in former shade grown tobacco field**
Brown's Harvest, Windsor (2011) (by Mike Davis) OJ Thrall Tobacco, Windsor (2018)

After centuries of worldwide prominence, markets for Connecticut River Valley tobacco declined sharply due to competition from growing areas in other countries. Windsor tobacco farmers recently shifted from shade grown to broadleaf tobacco. However, markets for broadleaf tobacco, which had its heyday over 50 years ago, are limited, so these operations have sold some of their land for development and have shifted to other crops on their remaining land. Part of Brown's Harvest is now an agricultural tourism business and the Thrall family founded Thrall Family Malt, a new agriculture value-added business for Windsor.

Windsor can help existing farms and foster new ones and thereby preserve its endangered agricultural heritage by taking actions now to implement policy to meet the vision and goals of the POCD for its agricultural resources.

Based on the vision and goals of the POCD, our experience in private and public land conservation efforts and our involvement with the Windsor Land Trust, the Town of Windsor at many levels, including its Conservation Commission, **Birchwood Farms strongly encourages Windsor to create a town funded Purchase of Development Rights (PDR) program and private sector funded Transfer of Development Rights (TDR) program that provide the one-time funds needed to preserve its remaining agriculture and natural area open space targeted for preservation.** Conservation easements are to be held by nonprofit land trusts to manage and monitor so that there are no ongoing costs to the Town. Combined with the lower cost of development rights purchase, this is the most cost-effective way to protect agricultural and natural area open space.

Establishment of a Transfer of Development Rights (TDR) program by Windsor would shift most of the cost of a PDR from the Town to a developer who would pay for those rights to increase the density of development on their property.

APPENDIX A

Michael P. Davis¹, Ph.D.

Dr. Mike Davis received a B.S. in biology and crop and soil science from the University of Connecticut, an M.S. in crops and soils from Purdue University and his Ph.D. in crop physiology with a minor in biochemistry from the University of Nebraska. Mike started his career as a Postdoctoral Research Associate, Department of Agronomy, University of Wisconsin-Madison, followed by an appointment in the Soils Department as a Research Associate and Lecturer in soil fertility.

Mike went on to a 38-year career with the American Malting Barley Association (AMBA), Milwaukee, Wisconsin, a nonprofit trade association comprised of US brewers, maltsters, and distillers, big and small (e.g. Thrall Family Malt, Windsor). He retired as AMBA President at the end of 2021. AMBA's mission is to encourage and support, primarily through research, a sustainable and adequate supply of high-quality malting barley. He also led the Congressional lobbying efforts of the National Barley Improvement Committee, a coalition of barley growers, researchers, and end-users, securing substantial increases in federal funding for barley research at USDA and state universities.

Mike began his farming career as a boy working in the garden at the family farm in Windsor, Connecticut and in his early teens as a shade-grown cigar tobacco picker at other farms. An independent study he conducted at the family farm as an undergraduate, "Commercial Vegetable Production in Connecticut" was the launch of Birchwood Farms-CT in 1974 with his Dad and brothers in vegetable production and now Christmas trees.

Mike and his spouse Susan Buchanan launched Birchwood Farms-WI in 2006 when they bought a farm on Washington Island, Wisconsin. BWF-WI is a sustainable vegetable farm that is exploring other crops, including malting and food barley and agricultural tourism. It also grows crops to provide food and cover for wildlife and manages its land, which is mostly fields, woods, and wetlands, to provide a diverse ecosystem of crops, and managed meadows and woods.

Susan M. Buchanan², Master Urban Planning

Susan Buchanan has over 30 years of experience working in land-use planning, marketing, real estate, historic preservation, architecture, and construction. She holds a master's degree in Land Use Planning from University of Wisconsin-Milwaukee's School of Architecture and Urban Planning.

Susan joined Tall Pines Conservancy (TPC), a nationally accredited, nonprofit land trust based in Waukesha County, Wisconsin, as their first Executive Director in 2008. TPC's mission is to preserve the rural heritage and aesthetic beauty of open spaces by protecting farmland, water resources and natural areas. Under Susan's leadership, TPC has preserved over 2,500 acres of agricultural and natural open space in Waukesha, Dodge, and Washington Counties.

She is a licensed real estate broker, served on the Shorewood, Wisconsin Plan Commission for 10 years, and is currently on the Washington Island Zoning and Planning Commission. In 2014, She joined the board of directors for Gathering Waters, Wisconsin's Association of Land Trusts and also served as chair of its Land Trust Council and Policy Committee. She was also active with the "Friends of Farmland Protection" actively advocating for farmland preservation initiatives in the State.

As a huge farmland preservation advocate, Susan has led Tall Pines partnerships in four USDA National Resources Conservation Service (NRCS) Regional Conservation Partnership Program (RCPP) projects, including the Wisconsin Statewide Farmland RCPP that is working to protect 5000 acres statewide.

Formerly she served on the Mayor of Milwaukee's Green Building Task Force, the Board of Directors for Wisconsin Commercial Real Estate Women and as the founding Chairperson for the Waukesha Public Art Commission for 5 years.

APPENDIX B



Preservation of Birchwood Farms, Windsor, Connecticut

1,3,5 & 105 Birchwood Road
(23 acres)

As Agricultural Open Space

March 4, 2024



Town of Windsor, CT GIS Map – Modified by applicant

Birchwood Farms Proposal

The Davis family is committed to preserving Birchwood Farms (BWF) as permanent agricultural open space and proposes working in collaboration with the Town of Windsor, land trusts, and other entities to bring this about.

1 Birchwood Road - AG Zoned – 3.4 acres (Michael Davis)
3 Birchwood Road – AG Zoned – 3.6 acres (Frank & Donna Davis)

(7 ACRES TOTAL)

Owners will place conservation easements on these two Agriculture zoned parcels to be held by a nonprofit land trust (e.g. Connecticut Farmland Trust) that would not allow further subdivision of each. Although current zoning regulations do not allow further subdivision, that could change in the future.

Associated costs to be covered by the Town of Windsor and/or other entities.

5 & 105 Birchwood Road (Michael Davis)

(16 ACRES TOTAL)

With Birchwood Brook and its associated wetlands traversing BWF, that portion is self-preserving. MDC sewer and water lines installed on Birchwood Road were intended only to serve homes by Rainbow Reservoir, and are not available for BWF, which was exempted from a water & sewer assessment. However, **the two properties can be residentially developed, with 7 potential new single-family homes.**

3 Birchwood Road (AG, 7 acres) – 2 residences per zoning

105 Birchwood Road (AA, 9 acres) – 5 residences - Alford Associates Inc. August 30, 2010

These adjoining parcels would be preserved without further subdivision through a **Purchase of Developmental Rights (PDR)** with funding from the Windsor Open Space Fund and/or other sources, or with funds from another landowner through **Transfer of Developmental Rights (TDR)** if such mechanisms can be put in place in Windsor. A conservation easement would be placed concurrently and held by a nonprofit land trust. Associated costs to be covered by the Town of Windsor and/or other entities.

In concert with the transfer of developmental rights, **the two properties are to be merged into one 16-acre parcel zoned AG, that cannot be subdivided**, with all uses allowed in an AG zone, including agricultural buildings, with no more than one residential house on the 16 acres.

The Davis Family Contribution to preserve Birchwood Farms is substantial and began with the purchase of the original 10-acre farmstead parcel in 1938. An additional adjoining 4 acres was purchased in 1973 and another 9 acres in 1996. Mortgage, property taxes, and other costs have added to the total cost of the family's private preservation of these properties, as has untold labor over 86 years. Forgoing the return that could be realized by development of the properties with the lower return provided through a PDR is another substantial contribution to its preservation.

We hope the Town of Windsor, in partnership with other entities, will provide funds for a PDR to serve as a match to our private contribution to realize the goal of permanent preservation of Birchwood Farms.