

# Agriculture and Forestry

## Farming Overview:

The capacity to produce food locally is a tremendous asset for a community, one that is too often taken for granted and undervalued. Most of the food Maine residents consume is imported from either the western United States or from foreign countries. As a result, the food supply could be interrupted or threatened for any number of reasons. Production from local farms makes substantial contributions to a community's food needs daily but becomes more valuable in times of high costs and supply disruption.

Due to the dramatic expansion of industrial agriculture, family farms are quickly becoming a relic of the past across America. Between 1974 and 2002, the number of corporate-owned U.S. farms increased more than 46 percent. Between 2005 and 2006, the United States lost 8,900 farms (a little more than one farm per hour). Another threat is development; according to the U.S. Environmental Protection Agency, 3,000 acres of productive farmland in America are lost every day to development.

On a more local level, American Farmland Trust's 2020 national study, *Farms Under Threat: The State of the States* found that only 4.8 percent of Maine's total agricultural land is currently protected, the lowest percentage of any New England state. This same study estimated that one of the most significant threats to farmland in Maine is low-density residential development.

## Importance of Local Farms:

Food safety is paramount when considering where the food came from. As a result of the pervasive use of antibiotics in confined animal feedlots, antibiotic resistant human pathogens have emerged. The Centers for Disease Control (CDC) estimates that each year roughly 1 in 6 Americans (or 48 million people) get sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases due to complications related to antibiotics in confined animal feedlots.

The trend of local farms disappearing affects not only food supply and quality but also the local economy; as family farms are bought out, the businesses they helped support disappear. Local seed and equipment suppliers shut down because corporations go straight to wholesalers or manufacturers. Demand for local veterinarian services collapses. This results in shops, restaurants, and doctor's offices closing, while communities shrink, which forces people to drive an hour or more for amenities and services.

Local farms also contribute to quality of life in communities. The U.S. Department of Agriculture's Economic Research Service conducted studies of what made certain rural areas thrive over others. The results showed, in part, amenities such as agritourism,

farmland protection in developing areas, and potential interactions between farmland conservation practices and rural amenities were key factors.

Equally important, farm and forested land also provide a buffer against high taxes. Dozens of fiscal studies have demonstrated that farm and forest land have a higher ratio of tax revenue-to-service demands than any other form of commercial or residential development. A farm on a tract of land demands minimal cost of local services for every tax dollar paid, while a house on the same tract would require more money for local services provided for every dollar of tax revenue. It stands to reason that undeveloped land subsidizes the “tax base” that towns so often pursue.

Finally, food security is an ever-increasing concern of late. While there are a number of national reserves for strategic materials such as rare metals or oil, there is no national reserve for food. Recognizing how critically dependent the food supply has become on fossil fuels and an intact transportation system, many towns and cities are actively pursuing plans to increase local food production.

To combat food insecurity, Maine’s Climate Action Plan, “Maine Won’t Wait,” has established goals to increase the amount of Maine-produced food consumed in the state, and to increase the total amount of land conserved statewide to 30 percent by 2030.

The benefits of local farms and farmland are too numerous to cover in their entirety. In addition to those highlighted above, other advantages include climate and environmental benefits such as:

- Avoiding the greater emissions associated with developed land.
- Providing the land base to grow a local and regional food economy and to create greater food security.
- Preserving the climate sequestration benefits that can result from farmers using climate-friendly agricultural practices on the land.

In Maine, agriculture and forestry provide the traditional economic backbone and the original engine that drove the local economy, and in many ways, they still do. Farm Credit East’s Northeast Economic Engine report, completed in 2020, calculated that Maine’s agriculture industry contributes over \$3.6 billion in economic impact and supports approximately 27,000 jobs statewide. In Winthrop, even today dozens of families rely on employment in the agricultural or forestry industries, or revenue from their own fields or woodlots. Farm and forest land also provides open space, wildlife habitat, and aesthetics, all of which Winthrop residents consider elemental to their community’s rural character.

This chapter profiles the current state of farming and forestry, and the extent of the resources for supporting these activities in Winthrop, which first gained fame as a center for apple orchards and the raising of Jersey dairy cattle.

## **Agriculture in Kennebec County:**

### **Ag & Forestry**

The USDA conducts a county-by-county census of farms every five years. As of the 2017 Census of Agriculture (most recent data), there were 7,600 farms in Maine; a decrease of 573 or 7 percent since 2012, which showed 8,173 farms in the state. However, the Census of Agriculture showed 642 total farms in Kennebec County, a 6-percent increase since 2012, with 23 percent growing crops and 77 percent raising livestock, poultry, and related products (eggs, milk, wool, other animals and animal products). For Kennebec County in the 2017 Census of Agriculture, the land area that accounted for farmland was 82,132 acres, an increase of 5 percent since 2012, and the average farm size was 128 acres, which is a decrease of 1 percent since 2012. The Census of Agriculture can break down farms by type and production by ZIP code. Not surprisingly, farm production in Winthrop mirrors that of Kennebec County.

Kennebec County is certainly not the center of Maine agriculture, but these farms still contribute significantly to the local and regional economies. The average farm in the region boasts an average market value of products sold at around \$76,000. Furthermore, many of these farms contribute to the labor market by providing employment.

From equipment repair to agriculture supply stores and veterinarian services, farming and agriculture create a diverse economic base for the region. The economic impact of agriculture extends even further; agritourism provides alternative opportunities for the public to interact with and observe farming activities. As of 2012, there were 270 farms participating in agritourism in Kennebec County. Farming can bring communities closer through farm days, harvest suppers, and farmers' markets. These opportunities drive collaboration and education and increase connections between farms and their communities.

According to the USDA, the major land uses for Maine's farmland were broken down in the following ways. From Table 1 below, Maine clearly is still very much a farming state with only 1 percent considered urbanized at the time of publishing for this data.

Of note, Maine has ranked number one in the United States for wild blueberry production since the 1950s. As of 2020, Maine ranked third in the production of maple syrup and ninth for potato production.

**TABLE 1: MAJOR LAND USES IN MAINE**

<b>Land use acreage Maine</b>			
		Acres (1,000)	Percent
Cropland	Cropland idled	55	0%
	Cropland pasture	8	0%
	Cropland used for crops	328	2%
Grassland pastur..	Pasture and range	159	1%
Forest use	Forestland grazed	48	0%
	Forest-use not grazed	17,143	87%
Special uses	Defense and industrial	21	0%
	Farmstead	34	0%
	Parks and wilderness areas	356	2%
	Rural transportation	198	1%
Urban	Urban	231	1%
Miscellaneous	Miscellaneous	1,159	6%

Source- USDA, Economic Research Service, 2012, updated 2017

\*Miscellaneous includes land in such uses as wetlands and unprotected woodlots.

### Local Farms:

The principal farming enterprises in Winthrop have historically been poultry, dairy, livestock, and fruits and vegetables. Recent trends in Maine and elsewhere indicate that small, specialty farms, also known as micro farms, are growing in numbers and replacing large, commodity-based farms.

Farms of all sizes, including smaller to mid-sized but in particular large farms, require prime farmland, hired labor, transportation infrastructure, and support services -- a mixture hard to find and maintain in Maine, whereas micro farms require only a local market for their products. These small farms can be managed part-time on small parcels of land, they can diversify into niche and value-added products, and they are flexible enough to shift products when necessary. The recent public emphasis on "local" and "organic" is an effort to highlight the importance of small farms. Examples of small farms are local vegetable stands, pick-your-own strawberries, maple syrup producers, and nursery operations.

While the average farm size in Kennebec County has decreased by 1 percent, per the 2017 Census of Agriculture, the number of farms has increased by 6 percent, representing the trend toward smaller scale farms. This trend toward smaller farms and micro farms is apparent in Winthrop, as well. There are fewer large-scale commercial

farms and an increased number of smaller, niche farms in recent years. Table 2 is a list of local farms in Winthrop; this list is by no means exhaustive.

**TABLE 2: LOCAL FARMS IN WINTHROP**

Farm Name	Product/Specialty	Farm Name	Product/Specialty
Cobb Heritage Farm	Grapes, hay, corn, pepper, eggplant, broccoli, cauliflower, green beans, tomatoes, squash, pumpkins	Absolem Cider	Cidery and winery
Cranberry Rock Farms	Certified organic vegetables, baked goods, prepared foods, vegan & gluten-free options	AGreekulture Farmstead	Free-range pork, permaculture
Hound and Hound Farm	Eggs, produce, hand dyed yarn and knitwear	Annabessacook Farm	Organic farm stand, community gardens, recreational opportunities
RT Farms	Equine & livestock feed and supplies	Wholesome Holmstead	Organic beef
Stevenson Farm Stand	Locally grown produce, PYO strawberries	Harvest Moon Farm	Tree fruit, maple syrup, flowers
Dirigo Hill Farm	Vegetables and fiber sheep	Cosmic Goat Farm and Creamery	Organic cheese, raw milk, certified organic produce

*Source: Winthrop Comprehensive Plan Committee members*

Although many acres of land in Winthrop are hayed annually, they remain largely unforested and undeveloped; in terms of agriculture, this land is generally underutilized for crop production or lying fallow. These agricultural parcels and farmlands provide natural areas and rural vistas that are important landscapes for the “rural character” and ecological habitat in Winthrop. Even though this land is currently underutilized, preservation and conservation of these areas is crucial to protecting the essence and history of the town, and hay production occurring on these lands remains important to the local and regional economy.

### **Farming Infrastructure:**

#### **Ag & Forestry**

Prime farmland is defined as land that is superior for the production of food, feed, forage, and other crops. Prime farmland has the soil quality (as designated by the USDA Soil Conservation Service and identified through soil taxonomy), growing season, and moisture supply required to economically produce sustained high yield of crops when treated and managed according to acceptable farming methods. Prime farmland soils produce the highest yields and farming in these areas may result in less damage to the environment.

The *Prime Farmland & Soils Map* included in the appendix of this Plan delineates the extent of “Prime Farmland soils” in Winthrop. Soils identified as Prime Farmland soils account for 2,503 acres, and an additional 1,594 acres have been identified as Farmland of Statewide Importance. These two designations account for approximately 21 percent of the total acreage in Winthrop. This does not include those soils potentially identified by the County Soil and Water Conservation District as being locally important for agriculture or forestry practices.

Prime Farmland soil is one of many principal factors important for preserving agriculture (along with accessibility to markets, capital, and many others). And while producers at all scales acknowledge the importance of Prime Farmland soils and Soils of Statewide Importance, less emphasis is placed on them with the paradigm shift toward the new style of farming and micro farms on much smaller amounts of land. However, this does not negate the need to protect and preserve land with these important natural characteristics and soil types, as they are a finite resource.

A growing trend in agriculture is the increasing popularity of high tunnels (temporary structures made from steel frames, usually semi-circular and covered in plastic; they’re also known as hoop houses) and greenhouses. This is particularly important in Maine where there is a short growing season. By using high tunnels or greenhouses, growing seasons can be extended, and crops can be protected from unpredictable climate conditions with increased yield.

The availability of markets for agricultural produce is particularly important for the new style of small producers who do not have access to commodity markets and operate too close to the margin to afford wholesalers or middlemen. Local farmers’ markets, roadside stands, pick-your-own, and nursery/greenhouses are examples of local marketing styles necessary for today’s farmers.

While Winthrop does not have a farmers’ market in town, there are nearby markets in Augusta, Hallowell, Wayne, and Belgrade. Winthrop also has several roadside produce vendors, of which Stevenson’s, mentioned above, is the most prominent. Recently, there has been discussion about creating a farmers’ market in Winthrop to promote small farms and encourage buying local products. The municipal parking lot, in the village area, would make an ideal, central location for the prospective farmers’ market.

Winthrop currently does not have any Community Supported Agriculture or community gardens; however, with the increased emphasis on buying local products, there is potential for interest in these offerings. Providing these amenities is an option for Winthrop to explore in the future.

### **Growing Farmer Population:**

Currently, the biggest challenge Winthrop farmers are faced with is likely the same challenge every farmer is encountering -- finding adequate labor. This challenge has several contributing factors, including the average age in Maine is mid-40s and Maine has the oldest population in the country. That means fewer young people for farming careers. This is exacerbated by the fact that fewer young people are learning vocational trades, and more are choosing traditional college educations. With most of the population being middle-aged, few young people, and fewer still who are interested in farming, the difficulty in finding labor is no surprise. This is coupled with the fact that farming is physically hard work with long hours and pay that doesn't typically compensate for the arduous number of hours worked.

And, as detailed further in the Housing chapter of this plan, the availability of workforce housing, rental housing, or other affordable housing options is another limiting factor for finding and retaining labor. This is compounded by the scarcity of those housing options in the more rural parts of Winthrop.

The Maine Department of Agriculture, Conservation and Forestry (DACF), Maine Farmland Trust (MFT), and the Maine Organic Farmers and Gardeners association (MOFGA) advocate for farming-friendly communities through a variety of land-use policies and farmland protections, and by promoting and building the population of farmers.

The Agricultural Resource Development Division of the DACF provides a variety of programs, resources, and information that help individual businesses in agriculture flourish and succeed despite the challenges of farming in Maine. A few examples include a grants and loans webpage, information on exhibitor opportunities, energy efficiency opportunities, training and education programs, Market Promotion and Special Events Program, and more. The DACF also has information and programs available on its webpage for the consumer, such as Explore, Experience, Discover, and Connect with Maine Farms, Maine Agritourism, State Fairs, Maine Maple Sunday, Open Farm Day, and Farmers' Markets.

The Maine Farms for Future Program is another great example of a program provided by DACF's Agricultural Resource Development Division. This program provides grants to farm business owners to conduct research and strategic business planning that brings about changes aimed at long-term, maintainable, farm profitability, and net worth.



Winthrop does not currently have a community supported agriculture program, community forests or community gardens, there has been discussion about developing a farmers' market. A farmers' market may evolve into more interest in these other areas such as a community supported agriculture program in the future.

### Land Use Policies:

Winthrop's Zoning Ordinance defines 10 districts in town with various allowable uses in each district. Of those 10 districts, four are aimed at protecting natural resources and include state-mandated language for agricultural practices. Aside from the table of allowable uses in each district, there is minimal language relating to agricultural and forestry practices.

**TABLE 3: AGRICULTURAL PRACTICES AND ZONING DISTRICTS**

Zoning District	Livestock Keeping	Agriculture	Intensive Agriculture
General Residential	Planning Board	Planning Board	Not Allowed
Limited Commercial	Planning Board	Planning Board	Not Allowed
General Commercial	Planning Board	Planning Board	Not Allowed
Industrial	Allowed	Planning Board	Planning Board
Village	Not Allowed	Not Allowed	Not Allowed
Rural	Allowed	Allowed	Planning Board
Resource Protection	Not Allowed	Planning Board	Not Allowed
Shoreland	Not Allowed	Planning Board	Not Allowed
Stream Protection	Not Allowed	Planning Board	Not Allowed
Public Water Supply	Not Allowed	Planning Board	Not Allowed

Source: Winthrop Zoning Ordinance

Under Article IV- Performance Standards, 13. Specific Activities, B. Livestock and Poultry Keeping, the Zoning Ordinance details specifics:

*Farm buildings, sheds, feedlots, and fenced pens used intensively for the keeping of livestock (such as horses, cattle, sheep, poultry, goats, and pigs) shall be located fifty (50) feet away from property lines, except where a property line abuts a public way, and one hundred (100) feet away from any existing abutting residences. Adverse conditions resulting from livestock keeping shall be handled under Section 12 (F). Nuisance Conditions.*

The referenced section on nuisance conditions states that noise, vibration, dust, smoke, odors, heat, glare, radiation, and waste disposal resulting from any use shall be kept to a practical minimum to avoid nuisance conditions.



While this may sound restrictive of agricultural practices in Winthrop, the Zoning Map in the appendix clearly shows that the Rural District is the largest zoning district in town. The Rural District has the most generous allowances for livestock keeping, agriculture, and intensive agriculture. In fact, only intensive agricultural uses need Planning Board approval, whereas livestock keeping, and agriculture are allowed without Planning Board approval in the Rural District.

Further, livestock keeping, and agriculture are allowed with Planning Board approval in General Residential, Limited Commercial, and General Commercial. The only Zoning District that disallows any type of agriculture is the Village District, and this land area consists of only a fraction of the town, is densely developed, and not ideal for any type of agricultural activities.

Winthrop's Zoning Ordinance strives to prevent incompatible land uses by encouraging agricultural practices in certain areas and requiring review for these practices in other areas. By promoting farming in the rural areas and discouraging it in the more densely settled village areas, the chances of incompatible land uses should be significantly reduced and most conflict avoided.

Winthrop's Zoning Ordinance allows both medicinal and recreational marijuana establishments along with cultivation facilities. There is a large cultivation facility located in a former printing operation building on Route 202. Cannabis cultivation facilities are essentially a form of agriculture.

Several organizations in Winthrop are actively working to protect farmland and forestland. They are detailed below:

- **Kennebec Land Trust (KLT)** works cooperatively with landowners and communities to permanently protect and conserve forests, shorelands, fields, and wildlife habitat. This is done by donation, fee purchases, and conservation easements. KLT offers educational programs and field trips for schools and other interested organizations, on relevant natural history, land stewardship, and conservation themes. KLT has also created miles of trails and conducts ongoing monitoring and land management.
- **Maine Farmland Trust** is a member-powered, statewide organization that protects farmland, supports farmers, and advances the future of farming. It strives to protect Maine farmland and to revitalize Maine's rural landscape by keeping agricultural lands working and helping farmers and communities thrive. It accomplishes this by working with farm families and collaborating with other partners, such as statewide groups, local and regional land trusts, and municipalities. Maine Farmland Trust has permanently protected one farm in Winthrop through an Agricultural Conservation Easement – the Cobb Heritage Farm. Maine Farmland Trust offers three programs aimed at protecting farmland:

Farmland Protection and Access Program, Policy and Research Program, and Maine Farmlink Program.

- **Land for Maine's Future (LMF)** is the primary state-administered funding vehicle for conserving land for its natural and recreational value. Types of land conserved by this program include mountain summits; shorelines of rivers, lakes, and ponds; coastal islands; beaches; forests; grasslands; wildlife habitat; farmland; and wetlands. Land acquired is from willing sellers only. The LMF pursues a mission defined by the public, providing a tangible return to all who cherish Maine's landscape (from hunters, hikers and snowmobilers to birdwatchers), and leverages federal and private funding for state priority purchases.

### **Farmland Protection Efforts:**

Since the 2010 Comprehensive Plan, Winthrop has promoted agriculture in appropriate locations in town. The previous Plan also noted that in spite of Winthrop's farming history, large-scale farms have disappeared. In their place, small-scale farms, and backyard farms have popped up, typically on much smaller acreages than required of their predecessors. This is a trend that continues today.

Regardless of the shrinking farm size, Winthrop's 2010 Comprehensive Plan included provisions for the protection of lands identified as prime farmland or capable of supporting commercial forestry and encouraged farm and forestry economic vitality. The plan also called for including them in economic development planning.

There are several regulatory measures Winthrop could take to further promote agriculture and farming in appropriate areas of town, if desired. These include developing a "Right to Farm" ordinance that can implement setback and buffer requirements for new developments that abut agricultural uses and can require residential developers to notify potential new homeowners when a property abuts a farm and that farmers have the right to engage in farm practices.

Winthrop could promote agriculture in town by amending the Zoning Ordinance to make agritourism more permissible. Agritourism is becoming increasingly popular and is a huge financial boon to many struggling farms of all sizes. Agritourism can take many forms, from farm visits, tours, and local shopping, to cultural, recreational, and learning experiences.

Another provision the town could consider is Maine's Voluntary Municipal Farm Support Program. Through this program, towns are allowed to develop a system of "farm support arrangements" with eligible farmland owners. The farmland owners voluntarily apply and may then be formally accepted by the town's legislative body. If accepted, they may be granted a 20-year agricultural conservation easement to the town in exchange for full or partial reimbursement of property taxes on their farmland and farm buildings during that 20-year period.

These and other strategies for supporting and encouraging agricultural and forestry practices in appropriate areas are detailed further in the Policies and Strategies table of this plan.

The appendix map **Prime Farmland & Soils Map** identifies the prime farmlands found throughout Winthrop as well as the conserved land owned by a variety of State and Federal offices.

The state has many provisions available to farmers for their protection and to aid them in continuing operation of viable farms. One such provision is Maine's Agriculture Protection Act (commonly known as the Right to Farm Law) that protects farmers from complaints regarding odors, noise, and other aspects of farming operations.

The state also offers multiple tax programs aimed at improving and protecting the businesses of agriculture and forestry. There are three current-use tax programs that relate to forestry or agriculture in Winthrop: Farmland Tax Law, Open Space Tax Law, and Tree Growth Tax Law (Tree Growth will be addressed later in this chapter). The Maine Legislature declared in the Farm and Open Space Tax Law (Title 36, MRSA, '1101 et. seq.), that "it is in the public interest to encourage the preservation of farmland and open space land in order to maintain a readily available source of food and farm products close to the metropolitan areas of the state." These programs are detailed below:

- **Farmland Tax Law:** This tax law was adopted to encourage the preservation of farmland and open space land and to protect farmland and open space land from competing with higher-valued uses. The farmland program provides for the valuation of farmland based on its current use as farmland, rather than based on its fair market value for other potential uses. This reduced land value results in lower property tax bills for owners of farmland. Lower taxes are designed to act as an incentive to preserve Maine's farming communities. In addition to reducing the farmland owner's tax burden, the municipality avoids costs associated with development and state subsidies are positively impacted.
- **Open Space Tax Law:** This law provides for the valuation of land based on its current use as open space, rather than its highest and best use. To qualify for open space classification, land must be preserved or restricted for uses providing a public benefit. This classification encourages landowners of open, undeveloped land to prevent or restrict its use from development by conserving scenic resources, enhancing public recreation, promoting game management or preserving wildlife, and/or wildlife habitat. This is mutually beneficial, as the landowner's proportionate tax burden is reduced, the municipality avoids costs associated with development, and state subsidies are positively impacted.

**TABLE 4: PARCELS OF LAND IN WINTHROP ENROLLED IN THE FARMLAND TAX LAW**

	2010	2020	% Change
<b>Number of Parcels</b>	13	14	7.69 %

<b>Acres First Classified</b>	0	0	0
<b>Farmland Acres</b>	210	296	41.0 %
<b>Farmland Valuation</b>	\$60,100	\$93,875	56.2 %
<b>Woodland Acres</b>	651	623	-4.30 %
<b>Woodland Valuation</b>	\$141,600	\$201,530	4.23 %

Source: 2020 Municipal Valuation Return Statistical Summary

**TABLE 5: PARCELS OF LAND IN WINTHROP ENROLLED IN THE OPEN SPACE TAX LAW**

	2010	2020	% Change
<b>Number of Parcels</b>	16	23	43.8 %
<b>Acres First Classified</b>	0	0	0 %
<b>Total Acres</b>	626	1060	69.3 %
<b>Total Valuation</b>	\$110,700	\$159,800	4.77 %

Source: 2020 Municipal Valuation Return Statistical Summary

Both tables 4 and 5 show a positive percent increase in the number of parcels enrolled in the state's current use tax law from 2010. For the Farmland Tax Law, the number of parcels increased by only one, but the acreage increased by 41 percent. The number of parcels enrolled in the Open Space Tax Law increased by 43.8 percent in the past decade, with an increase of 69.3 percent in acreage. Of these two tables, the only category that decreased was woodland acres; that category decreased by 4.3 percent in the last 10 years.

There are also many publicly sponsored programs to support local agriculture, including the Maine State Grange, University of Maine's Sustainable Agriculture program, and the Farmlink Program through Maine Farmland Trust, which matches prospective farmers in search of land with retiring farmers in search of successors, to name a few. Additionally, the DACF has put a great deal of effort into marketing local agriculture, from promotions like Maine Maple Sunday and Open Farm Days, to support farmers' markets and institutional buying.

### **Threats to Farmland and Farms:**

As mentioned above, one of the biggest hurdles for farms of nearly every size, for a variety of reasons, is finding sufficient labor. But the challenges of owning and running an operational farm are limitless. Also mentioned above is the importance of Prime Farmland Soil and Soils of Statewide Importance.

In Maine, development pressure from commercial solar projects is also impacting farmlands. According to an analysis conducted by Maine Audubon, of the 185 solar development proposals that were reviewed and approved by the Maine Department of Environmental Protection (DEP) as of June 2021, 90 percent intersected with land identified by the Natural Resources Conservation Service (NRCS) as Prime Farmland Soils and Soils of Statewide Importance.

As these commercial solar projects eat up the land with finite soils that yields the highest production, farmers are further challenged. In Winthrop, the encroachment of new homes and commercial development onto land that was previously used for agricultural purposes is less of an issue than the construction of commercial solar projects on old farmland.

Currently in Winthrop, there are no large tracts of agricultural or industrial forestland that have been or may be sold for development in the future.

### **Forestry:**

Forests provide many values to the Winthrop community in addition to supplying a source of wood and income to landowners, residents, and local sawmills. Forested areas typically collect water in the landscape by intercepting precipitation thereby reducing the volume and rate of runoff as well as reducing soil erosion and phosphorus loading in lakes, streams and ponds. Forests also retain soil moisture across a broad landscape that may otherwise be subject to larger seasonal flooding and its associated erosion problems. Additionally, forests provide habitat and travel corridors for wildlife, and outdoor recreational areas, and they purify the air.

Winthrop's tree coverage, depicted in the *Tree Canopy Map* in the appendix, shows a significant forested area across the town. Small tree plantations, many of which sprung from the Civilian Conservation Corps era, are scattered throughout the town and are often adjacent to agricultural land use. Wooded areas are functionally divided into coniferous softwoods, deciduous hardwoods, and mixed forests. Wooded areas may also include tree plantations, managed and unmanaged forests, and some developed areas where a closed canopy obscures the view of urbanization and suggests a relatively lower density of development.

Despite the amount of forested land in Winthrop, the town does not currently have a town or publicly owned woodland or forest under management.

Table 6 below shows the forestry harvest data from 1991 to 2020, along with totals and averages from each category. Perhaps the most notable column is the "Change of Land Use, Acres" category. From 1991 to 1999, there were only six changes in land use. From 2000 to 2008, the acres converted to a different land use increased dramatically, coinciding with the housing bubble at the time. From 2009 to 2013, only 9 acres were converted to a different land use. From 2014 on, the trend of converting acres to a different land use continued to increase, albeit somewhat erratically with only 2015 having no conversion to a different use over that span.

**TABLE 6: FORESTRY HARVEST INFORMATION**

YEAR	Selection harvest, acres	Shelterwood harvest, acres	Clearcut harvest, acres	Total harvest, acres	Change of land use, acres	# of active notifications
1991	306	10	3	319	3	11
1992	199	13	12	224	0	11
1993	138	0	1	139	1	7
1994	179	23	0	202	0	8
1995	163	65	5	233	0	9
1996	185	25	0	210	2	5
1997	447	25	0	472	0	6
1998	775	40	10	825	0	16
1999	362	0	30	392	0	25
2000	104	10	15	129	12	30
2001	168	117	0	280	30	18
2002	346	0	0	346	23	15
2003	212	0	0	212	14	9
2004	226	0	0	226	4	12
2005	96	100	0	156	6	10
2006	215	0	0	215	17	12
2007	147	0	0	147	24	9
2008	149	0	0	149	19	11
2009	59	0	0	59	0	10
2010	30	0	0	30	0	5
2011	446.38	0	0	446.38	0	19
2012	280.12	23	0	303.12	9	14
2013	122	39	0	161	0	17
2014	165	12	0	177	64	15
2015	506	0	0	506	0	15
2016	280	0	0	280	12.5	15
2017	350.5	8	5	363.5	32	19
2018	214	20	0	214	4	17
2019	178.8	2	0	180.8	5	16
2020	94	0	0	94	15	16
Total	7,143	532	81	7,691	297	402
Average	238	18	3	256	10	13

Source: Data compiled from Confidential Year End Landowner Reports to Maine Forest Service.

### Tree Growth Tax Law Program:

As of 2020, 45 parcels in Winthrop were classified as Tree Growth properties under the State's Tree Growth Tax Law Program (Table 7). This program, like the Farmland and Open Space Tax Law programs, provides landowners an opportunity to have their land valued for its productivity rather than its market value. Over the course of the last decade, there has been a 21.6-percent increase in the number of parcels participating in this program and an increase of 29 percent of total acres enrolled in Winthrop's Tree Growth Tax Law Program. The biggest increase, at 98 percent, is the total value of the land in this program. This is not surprising considering the increased value of land over the last decade.

**TABLE 7: WINTHROP PARCELS ENROLLED IN THE TREE GROWTH TAX LAW PROGRAM**

	2010	2020	% Change
# Of Parcels	37	45	21.6 %
Softwood Acres	92	200	117 %
Mixed Wood Acres	832	1,003	20.6 %
Hardwood Acres	430	545	26.7 %
Total Acres	1,354	1,747	29.0 %
Total Value	\$305,344	\$603,262	98 %

*Source: 2020 Municipal Valuation Return Statistical Summary*

In contrast to the Farmland Tax Law and the Open Space Tax Law programs, the State reimburses municipalities for a portion of lost tax revenues from properties enrolled in the Tree Growth Tax Law Program. Additionally, local participation is typically higher because this tax law allows multiple uses on the designated property, as long as the parcel remains primarily used for the growth of trees to produce forest products that have commercial value. As with the Farmland Tax Law and the Open Space Tax Law programs, land withdrawn from the Tree Growth Tax Law Program before maturity is subject to financial penalties.

### Analysis:

Winthrop's economic history lies in farming and forestry, trends that shaped the population and landscape and are still visible today. While there has been an undeniable shift in the style and types of farming from these early years, it is also undeniable that agriculture and forestry are still an essential factor in Winthrop today.



With the increasing trend of small farms, micro farms, and buying locally produced food, there are steps the town could take to support, promote, and encourage these farms. Amending the Zoning Ordinance to be more permissible in allowing agritourism would be greatly beneficial to the farming community. There has also been significant interest in forming a farmers' market in town, which is a viable option for the town to explore.

These and other recommendations can be found in the Policies and Strategies table of this plan. Farming, forestry and local food production are essential elements for communities of all sizes. Winthrop should consider what steps can be taken to ensure that the existing farms are fully supported through the town, while streamlining the permitting process for future farming endeavors.