

DRAFT #3

DRESDEN, LINCOLN COUNTY, MAINE

AGRICULTURE AND FORESTRY RESOURCES

The Purpose of this section is to:

1. Describe the agricultural and forestry resources in Dresden, including farmlands and forestlands in terms of their extent, characteristics and importance to the economy and character of the town and region.
2. Predict whether the viability of important agricultural and forestry resources will be threatened by the impacts of future growth and development.

AGRICULTURAL

The capacity to produce food locally is a tremendous asset for a community. Most of the food Maine people eat is imported from other states such as California or Florida, or from foreign countries. As a result, our food supply could be interrupted or threatened for any number of reasons. Production from local farms can make substantial contributions to the food needs of the community at all times, but becomes even more valuable if there is a supply disruption.

Local farms also contribute to the quality of life in a community. By keeping farmland as farmland rather than developing it, open space is preserved, enhancing the aesthetic qualities of a town and protecting environmental and wildlife habitat. People in the region enjoy food grown and raised locally. Businesses and individuals get economic benefit from farming activities, including veterinarians, seed suppliers, feed suppliers, equipment dealers, markets, restaurants, etc.

Maine defines farmland as a parcel consisting of 5 or more acres of land that is classified as prime farmland, unique farmland or farmland of statewide or local importance by the Natural Resources Conservation Service within the USDA, or that is used for the production of agricultural products. Agricultural products are defined as those plants and animals and their products that are useful to humans and include, but are not limited to, forages and sod crops, grains and feed crops, dairy and dairy products, poultry and poultry products, bees and bee's products, livestock and livestock products and fruits, berries, vegetables, flowers, seeds, grasses and other similar products, or any other plant, animal or plant or animal products that supply humans with food, feed, fiber or fur. "Agricultural products" does not include trees grown and harvested for forest products.

In its Land Use Ordinance, Dresden defines agriculture as "the cultivation of soil, producing or raising crops, including gardening, as a commercial operation. The term shall also include greenhouses, orchards, nurseries, and versions thereof, but these two terms, when used alone, shall refer specifically to a place where flowers, plants, shrubs, and/or trees are grown for sale".

Prime Farmland is defined by the USDA as the land that is best for producing food, feed, forage, fiber and oilseed crops. It has the soil quality, growing season and moisture supply needed to produce a sustained high yield of crops while using acceptable farming methods. It produced the highest yields and requires minimal amounts of energy and economic resources, and farming it results in the least damage to the environment. It is *a limited strategic resource*. No more of it is being created. Often, this type of farmland is well-suited for home and road construction, septic sewerage disposal and other non-agricultural uses. Because of the competition for prime farmland, it is important that planners are aware of its existence and extent and have the opportunity to evaluate the need for its protection.

Farmland of Statewide Importance is defined as land that is of statewide importance for the production of food, feed, fiber, forage and oilseed crops. Criteria for defining this land are determined by the appropriate state agency or agencies. Generally these farmlands include those that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmlands if conditions are favorable. Also, some of these farmlands may include tracts of land that have been designated for agriculture by state law.

The town of Dresden has a large percentage of its land identified as *containing prime farmland soils*: 1,798 acres (8 percent) out of a total of 21,237 acres. High concentrations of prime agricultural soils exist along the shoreline of Merrymeeting Bay and floodplain areas of the Kennebec River. In addition, there are 4,538 (21 percent) acres of *farmland of statewide importance* in Dresden.

The locations of soils designated as "Prime Farmland" and "Farmland of Local Importance" are depicted on the maps titled *Prime Agricultural Soils, Dresden* and *Distribution of Prime Farmland and Farmland of Local Importance*, both from the USDA-NRCS.

Dresden has a number of small-scale farms, although firm figures are not available. These small farms are supported by pick-your-own berry picking operations, roadside stands, local farmers markets and community-supported agriculture (CSA) programs. There is also support to local organic farmers from MOGFA, the Maine Organic Farmers and Gardening Association, which provides technical assistance specific to organic farming and gardening.

The principal farm products in Dresden are berry crops (blueberries, strawberries, some cranberries and some elderberries raised for medicinal purposes), with a predominance of blueberries; other fruits, and vegetables; forage crops; poultry and poultry products; some livestock, including organically-raised beef; and some dairy. Five farming enterprises in town are enrolled in Maine's Farm Land and/or Open Space Land Use Programs. These are real estate tax-relief programs which allow property owners a reduction in their assessed property values.

FORESTRY

Forest land is defined by the USDA's Natural Resources Conservation Service as "a land cover/use category that is at least 10 percent stocked by single-stemmed woody species of any size that will be at least 4 meters (13 feet) tall at maturity. Also included is land

bearing evidence of natural regeneration of tree cover (cut over forest or abandoned farmland) and not currently developed for non-forest use. Maine's Department of Agriculture, Conservation and Forestry defines a forest simply as "a biological community dominated by trees and other woody plants."

Prime Forestland is the land that has soil capable of growing wood at the economical productive growth rate for a given tree species. Identification of lands as such does not denote a single or dominant use. Nor does it preclude the use of these lands for other forest products and services, but only identifies the most productive forestlands on which a town depends for present and future wood needs. Soils are rated only for productivity.

The locations of soils designated as prime forestland, also known as "High Forest Productivity" soils, are depicted on the map titled "Forest Productivity for the Town of Dresden Maine" from the USDA-NRCS.

Maine's forests and forest industry play a vital role in the state's economy. Forests provide a wide variety of wildlife habitats for both game and non-game species, and an abundant and diverse wildlife population for the use and enjoyment of all Maine citizens. Forests protect the soil and water and contribute to many recreational and aesthetic experiences. Loss of forestland can be attributed to development and to irresponsible harvesting techniques. To optimize forestland use, forests should be effectively managed and harvested.

Maine's Department of Agriculture, Conservation and Forestry does not have current data for the total number of forested acres in Dresden or the number of acres of different types of forests. However, most forests in this area are mixed oak-pine forests containing 15-20 species.

There is Maine Forest Service data available from 2004. At that time, of Dresden's total 21,241 acres, there were 16,080 acres of forested land (76 percent of the total acreage). This forested land consisted of 3,275 acres of deciduous forest, 3,308 acres of evergreen forest, 6,565 acres of mixed forest, 138 acres of scrub/shrub, 654 acres of wetland forest, 1,278 acres of light partial cut, 263 acres of heavy partial cut and 599 acres of regenerating forest. Water accounted for 1,667 acres in Dresden.

The Maine Forest Service does collect forest harvest information, based on required landowner reports (see Table 1, showing the summary of data from 1991 to 2012). The data suggest that forest harvesting is an ongoing, important land use activity in Dresden.

Private landowners who intend to harvest are required to notify the state, and these notifications are forwarded to the towns, but the notifications are not a permit and there is no waiting period. As a result, towns do not always receive them in a timely manner (see the attached sample of the Notification of Intent to Harvest form, which is sent to the Code Enforcement Officer for Dresden).

Landowners are not required to use the services of a Licensed Forester in managing a harvest. The only instance where the services of a forester are required is for those landowners who are enrolled in the state's Tree Growth Property Tax Program, which is administered by the town assessor. In Maine, less than 25 percent of small forest owners employ a forester in overseeing a timber harvest. Thus, the degree to which forest owners

in Dresden who do not use the services of a forester might "minimize impacts on the natural resources" of the town could vary widely.

However, the data indicates that most harvesting in Dresden is selection or partial harvesting, and that clearcutting is relatively uncommon (note that clearcutting as a forestry practice is not the same as clearing forest for development). The data does not indicate a large amount of clearing for development.

In addition, there are forestry regulations provided by the Dresden Land Use Ordinance, which is reviewed on an annual basis and updated as necessary. Dresden has adopted the statewide timber harvesting standards and the regulations for shoreland areas, and has entered into an enforcement agreement with the Maine Forest Service.

As defined by the Maine Forest Service, group selection, or selection harvesting, is essentially a small-scale clearcut where groups of trees in a given area are harvested over many years so that the entire stand has been cut within 40 to 50 years. This method is used primarily on bottomland hardwood stands to harvest high-quality, top dollar logs. The size of the group cut determines the tree species that are likely to return after the harvest. Openings that are less than one-fourth acre favor shade-tolerant species, and larger openings favor sun-loving species. Group selection provides ideal pockets of young vegetation for grouse, deer and songbirds.

Timber harvesting is a relatively minor economic activity in Dresden and is conducted mostly through selection harvest. In Dresden, as throughout Maine, local residents selectively harvest timber for firewood on a small scale, which provides a sideline income for some or a means of heating their homes for others. Periodic harvesting of timber can also provide significant income for private landowners. There is no commercial forest industry in town.

Table 1: Summary of Timber Harvest Information for the town of Dresden

Year	Selection Harvest Acres	Shelterwood Harvest Acres	Clearcut Harvest Acres	Total Harvest Acres	Change of Land Use Acres	Number of Active Notifications
1991	242	15	0	257	0	10
1992	306	40	6	352	0	15
1993	82	0	0	82	0	8
1994	19	0	0	19	0	3
1995	116	20	2	138	0	9
1996	368	0	7	375	4	15
1997	231	0	69	300	69	14
1998	431	6	17	454	58	22
1999	288	12	0	300	39	40
2000	131	0	0	131	0	32
2001	112	0	0	112	8	16
2002	16	0	0	16	0	14
2003	240	0	12	252	2	18
2004	189	10	0	199	27	24
2005	200	0	0	200	3	16

2006	363	2	0	365	3	21
2007	559	15	0	574	53	25
2008	151	53	0	204	2	23
2009	180	9	0	189	0	26
2010	384	174	0	558	9	35
2011	324	0	5	329	40	21
2012	479.1	0	0	479.1	1	23

Table 2: Tree Growth Property Tax Program enrollment data for the town of Dresden

	(Dresden) 9/5/1994	(Dresden) 8/26/2003	(Dresden) 10/31/2013	Overall Change Since 1994
Total Acres	1249.70	1266.60	1256.70	increased 7.0
Soft Wood	315.20	327.00	365.90	increased 50.7
Mixed Wood	760.50	715.80	632.80	decreased 127.7
Hard Wood	174.00	223.80	258.00	increased 84.0
Number of Landowners	29	27	31	increased 2
Number of Parcels	35	33	37	increased 2

THREATS FOR FOREST AND FARMLANDS

Across Maine and the U.S. generally, low-density residential development is the greatest factor contributing to the loss of productive farmland and forest. Typically, soils that are considered prime farmland are also desirable places for residential development because these areas are often clear and the soil characteristics make road construction and installation of septic systems less expensive.

PROTECTION OF FOREST AND FARMLAND

The town of Dresden's existing Land Use Ordinance includes a Rural Land Use district with a one acre minimum lot size. Permitted uses are limited to single homes with outbuildings and farming.

The town considers that existing provisions with the Land Use Ordinance provide adequate protection for Dresden's agricultural and forestry resources.

In addition to land-use regulation, a variety of state tax-relief land use programs provide financial incentives for landowners to keep land undeveloped and managed for long-term productivity. These include the previously referred-to Farm and Open Space and Tree Growth Tax Laws. These programs tax land based on its current use rather than on fair market value.

Farm owners and forestland owners in Dresden also participate in soil and water conservation programs through the local NRCS office. There are 12 enrollments in the Environmental Quality Incentives Program, 3 enrollments in the Conservation Stewardship Program and 1 enrollment in the Agricultural Management Assistance Program.

Overall, farmland and forestland in Dresden are currently adequately protected through the methods described above. These regulations and taxation programs should continue to permit productive timber-harvesting and agricultural operations such as CSA's (Community Supported Agriculture), greenhouses, farmers markets, roadside stands and pick-your-own operations.

Goals, Policies and Implementation Strategy regarding Agricultural and Forestry Resources

- **Goals**

1. Preserve the rural character and quality of Dresden.
2. Protect significant natural resources in Dresden.
3. Conserve important agricultural and forest resources.
4. Recognize the importance of private landowner rights.

- **Policies**

1. Maximize productivity and multi-use of forest resources and minimize degradation of wildlife habitats and water quality.
2. Encourage the conservation of prime farmlands.
3. Maximize productivity and multi-use of agricultural resources and minimize degradation of wildlife habitats and water quality.
4. Encourage the economic viability of the agricultural and forestry sector.

- **Implementation Strategy**

Implementation will be through the town's Land Use Ordinance, which is reviewed and updated as needed.