# 09-137 DEPARTMENT OF INLAND FISHERIES & WILDLIFE

**Chapter 10: SIGNIFICANT WILDLIFE HABITAT**

**10.01 Scope of Rules**

These rules are applicable only to "significant wildlife habitat" as described in 38 M.R.S.A. §480‑B (10) and are adopted pursuant to the law that these habitats be defined by the Department of Inland Fisheries and Wildlife and protected by the Department of Environmental Protection.

**10.02 Definitions**

When used to define and map significant wildlife habitat, the following words and terms will have the following meanings:

1. **Habitat for species appearing on the official state or federal lists of endangered and threatened species**. The Department reserves this subsection for future definition.

2. **High and moderate value deer wintering area**. An area used by deer when snow depth exceeds 12 inches in the open and hardwoods, deer sinking depth exceeds 8 inches in the open and hardwoods, and mean daily temperature is below 32 degrees Fahrenheit, provided that:

a. Using Department Deer Wintering Area and Travel Corridor procedure dated 12/22/93, deer use is documented during a minimum of two years in the most recent 10 year period at the time of designation, with one being a ground survey;

b. Using Department Deer Wintering Area and Travel Corridor mapping criteria dated 12/22/93, the area excludes nonforested wetlands, agriculture, development, clearcuts, hardwood forest types, and forest stands dominated by Eastern larch; and

c. Using the Department Deer Wintering Area and Travel Corridor rating procedure dated 12/22/93, the area through a combination of intensity of deer use, quality of softwood shelter, and area size is rated high or moderate.

3. **High and moderate value travel corridors**. The Department reserves this subsection for future definition.

4. **High and moderate value waterfowl and wading bird habitats**. Waterfowl are members of the family Anatidae including but not limited to brant, wild ducks, geese, and swans. Wading birds include but are not limited to herons, glossy ibis, bitterns, rails, coots, common moorhens, and sandhill cranes. A high and moderate value waterfowl and wading bird habitat means one of the following:

a. **Inland habitat identification criteria**. A high to moderate value inland habitat is an inland wetland complex, and a 250 foot wide zone surrounding the wetland complex, that through combination of dominant wetland type, wetland diversity, wetland size, wetland type interspersion, and percent open water meets Department guidelines or is an inland wetland complex that has documented outstanding use by waterfowl or wading birds. Determination of high to moderate value inland habitat is based on the following.

1) **Wetland type**. Dominant wetland type is rated by the assigned score for the wetland type of greatest area in the wetland. Wetland type is determined using the classification system published by the Department based on McCall, 1972, for waterfowl and wading bird habitat rating. A score for the value to waterfowl and wading birds is assigned to each type using the Department’s rating procedure.

2) **Wetland diversity**. Wetland diversity is rated by assigning the wetland to one of the diversity categories based on the number of wetland types present in the wetland using the Department’s rating procedure.

3) **Wetland size**. Wetland size is rated by assigning the wetland to one of three size categories based on the total area of the wetland using the Department’s rating procedure.

4) **Interspersion**. Wetland type interspersion is rated by assigning the wetland to one of three interspersion categories using the Golet (1974) system, as modified for Maine in the Department’s rating procedure.

5) **Open water**. Percent open water is rated by assigning the wetland to one of four categories, based on the percent of the wetland in open water using the Department’s rating procedure.

**NOTE**: The following are literature citations as referenced above:

McCall, C.A. 1972. *Manual for Maine Wetlands Inventory*. Maine Department of Inland Fisheries and Game, Augusta, Maine. 38pp.

Golet, F.C., and J.S. Larson. 1974. *Classification of Freshwater Wetlands in the Glaciated Northeast*. Resource Publication 116. U.S. Department of the Interior, Washington, D.C. 56pp.

**NOTE**: Regardless of its identification on maps as a high or moderate value waterfowl and wading bird habitat, an upland area adjacent to a great pond is not considered high or moderate value waterfowl and wading bird habitat unless the upland area is within 250 feet of one or more freshwater wetlands that are high or moderate value waterfowl and wading bird habitat. [38 M.R.S.A. §480-EE]

b. **Tidal habitat identification criteria**. A high or moderate value tidal habitat is as defined in the Department’s rating procedure or is a tidal habitat that has documented outstanding use by waterfowl or wading birds or use by a rare species of waterfowl or wading birds. Habitat type is determined using the classification system published by Cowardin *et al*. (1979) and defined in the Department’s rating procedure. Four habitat types considered as potential high or moderate value tidal habitat are described below.

1) **Aquatic bed habitat**. The extent of aquatic bed habitat for the delineation of high value tidal waterfowl and wading bird habitat will be defined by the eelgrass (Zostera marina) beds currently mapped by Maine Department of Marine Resources. Eelgrass beds greater than 25 acres in size are high value. Eel grass beds greater than or equal to 2.5 acres but less than 25 acres are moderate value.

2) **Reefs**. Reefs included in tidal waterfowl and wading bird habitat in Maine are limited to mussel bars or beds. All mussel bars or beds are high value tidal waterfowl and wading bird habitat.

3) **Emergent wetlands**. Emergent wetlands equal to or greater than 25 acres in size are high value. Emergent wetlands greater than or equal to 2.5 acres but less than 25 acres are moderate value.

4) **Mudflats**. Mudflats equal to or greater than 25 acres are high value tidal waterfowl and wading bird habitat. Mudflats greater than or equal to 12.5 acres but less than 25 acres are moderate value. Mudflat immediately adjacent to one of the above habitats will result in the combined habitats being rated high if the total area is greater than 25 acres in size or moderate if the combination is greater than or equal to 2.5 acres but less than 25 acres.

**NOTE**: The following literature citation as referenced above: Cowardin, L.W., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Washington, D.C. 103 pp.

5. **Shorebird nesting, feeding, and staging areas**. Shorebird nesting, feeding, and staging areas, and a zone surrounding those areas, are significant wildlife habitats. The zone surrounding a shorebird feeding area is 100 feet wide, and is referred to as “the feeding buffer.” The zone surrounding a shorebird roosting area is 250 feet wide and is referred to as “the roosting buffer.” Shorebird species include the members of the families Scolopacidae, Charadriidae, and Haematopodidae, including, but not limited to, sandpipers and plovers. A complete list of species is provided in the Department’s procedures for classifying significant shorebird habitat. [The Department has not adopted a definition of shorebird nesting area habitat, and reserves this subsection for future definition.]

a. **Definitions**

1) **Shorebird feeding area**. A shorebird feeding or staging area that is not a roosting area. The shorebird feeding area includes a 100-foot-wide surrounding buffer referred to as “the feeding buffer.”

2) **Shorebird roosting area**. A shorebird feeding or staging area that is also a roosting area. The shorebird roosting area includes a 250-foot-wide buffer referred to as “the roosting buffer.”

3) **Staging**. Staging areas include areas used for feeding, roosting, and loafing during spring and fall migration and post-breeding dispersal.

b. **Shorebird nesting**, feeding, and staging area identification criteria. A feeding or staging site qualifies as significant shorebird habitat if either of the following criteria is met, as determined by an individual with experience or training in wildlife ecology.

1) **Number of observations**. The mean number of shorebird observations since 1987 for a site is 10% or more of the total mean number of shorebirds surveyed in a particular shorebird survey unit as defined in Department procedures.

2) **Number of shorebirds**. The mean number of shorebirds for a single species since 1987 at a site is 10% or more of the overall or total mean number observed of that species in the encompassing shorebird survey unit.

**NOTE**: Shorebird occurrence data is from the current Department database as described in procedure created December 22, 1993, and updated September 1, 2005. As new data is entered the mean of the observations is recalculated.

6. **Seabird nesting island**. Seabird nesting islands are significant wildlife habitats.

a. **Definitions**. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

1) *Seabird*. Colonial nesting waterbirds including Leach's Storm-petrel, Great Cormorant, Double-crested Cormorant, Laughing Gull, Herring Gull, Great Black-backed Gull, Common Tern, Arctic Tern, Roseate Tern, Razorbill, Black Guillemot, Atlantic Puffin, and Common Eider.

2) *Seabird nesting island*. (a) An island, ledge, or portion thereof in tidal waters that has documentation of 25 or more: nests or seabirds, adult seabirds displaced from nests, or in combination (single species or aggregate of different species) in any nesting season during, or since, 1976; provided that the island, ledge, or portion thereof continues to have suitable nesting habitat. (b) An island, ledge, or portion thereof in tidal waters that has documentation of one or more nests of a seabird that is a Maine endangered or threatened species in any year during, or since, 1976 provided that the island, ledge, or portion thereof, continues to have suitable nesting habitat.

b. **Maps**. Seabird nesting islands are delineated on 7.5 minute U.S. Coast and Geodetic Survey maps developed by the Department. The maps are identified as Significant Wildlife Habitat Seabird Nesting Island Maps #1-55, January 1998.

7. **Significant vernal pool habitat**. A vernal pool, also referred to as a seasonal forest pool, is a natural, temporary to semi-permanent body of water occurring in a shallow depression that typically fills during the spring or fall and may dry during the summer. Vernal pools have no permanent inlet or outlet and no viable populations of predatory fish. A vernal pool may provide the primary breeding habitat for wood frogs (Rana sylvatica), spotted salamanders (Ambystoma maculatum), blue-spotted salamanders (Ambystoma laterale), and fairy shrimp (Eubranchipus sp.), as well as valuable habitat for other plants and wildlife, including several rare, threatened, and endangered species. A vernal pool intentionally created for the purposes of compensatory mitigation is included in this definition.

Whether a vernal pool is a significant vernal pool is determined by the number and type of pool-breeding amphibian egg masses in a pool, the presence of fairy shrimp, use by rare, threatened or endangered species, or other criteria as specified in Section 7.b. Significant vernal pool habitat consists of a vernal pool depression and that portion of the critical terrestrial habitat within 250 feet of the spring or fall high water mark of the depression.

**NOTE**: The term vernal (vernal = spring) pool is used in the Natural Resources Protection Act [38 M.R.S.A., §480-B(10)], and has typically been used to discuss the types of pools described in Section 7. However, because some pools are wet in both spring and fall, and others are never dry, they have also been referred to as “seasonal forest pools.” Vernal pool is still a common term, and will continue to be used in this section.

a. **Definitions**. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

1) **Critical terrestrial habitat**. Uplands and wetlands associated with significant vernal pools used by pool breeding amphibians for migration, feeding, and hibernation, in particular, forested wetlands and forested uplands that provide deep organic litter, coarse woody debris and canopy shade.

2) **Egg mass**. Three or more individual eggs clumped in a gelatinous matrix constitute an egg mass. Egg masses often occur in clusters, but each mass within a cluster must be counted as an individual egg mass.

3) **Natural**. A natural vernal pool includes pools of natural origin that have been modified or excavated. A natural vernal pool does not include other natural wetland types (wet meadows, marshes, etc.) that have been altered and currently function as vernal pools.

4) **Pool-breeding amphibians**. Animals that, as part of their life cycle, reproduce in vernal pools. Most pool-breeding amphibians return to reproduce in the pool where they originated. Most adult pool-breeding amphibians spend less than one month in breeding pools; the rest of their annual cycle is spent in critical terrestrial habitat.

5) **Qualified individual**. An individual who has experience and training in either wetland ecology or wildlife ecology and therefore has qualifications sufficient to identify and document a significant vernal pool.

6) **Significant vernal pool**. The vernal pool depression within a significant vernal pool habitat.

7) **Significant vernal pool habitat**. A significant vernal pool and that portion of the critical terrestrial habitat within 250 feet of the spring or fall high water mark of the vernal pool depression.

8) **Vernal pool depression or vernal pool**. This area includes the vernal pool depression up to the spring or fall high water mark, and includes any vegetation growing within the depression.

b. **Significant vernal pool habitat identification criteria**. Vernal pool habitat significance must be determined and documented by a qualified individual.

1) **Abundance**. Any one of or combination of the following species abundance levels, documented in any given year, determine the significance of a vernal pool habitat.

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| **Species** | **Abundance Criteria** |
| Fairy shrimp | Presence in any life stage. |
| Blue spotted salamanders | Presence of 10 or more egg masses. |
| Spotted salamanders | Presence of 20 or more egg masses. |
| Wood frogs | Presence of 40 or more egg masses. |

2) **Rarity**. A pool that has documented use in any given year by a rare species, or state-listed endangered or threatened species that commonly requires a vernal pool to complete a critical portion of its life-history is part of a significant vernal pool habitat. Examples of vernal pool dependent state-listed endangered or threatened species include, but are not limited to, Blanding’s turtles, Spotted turtles, and Ringed Boghaunter dragonflies. The rare species that must be considered are limited to: Ribbon Snakes, Wood Turtles, Swamp Darner Dragonflies and Comet Darner Dragonflies.

3) **Identification period**. Egg masses must be counted just past the peak breeding period of pool-breeding amphibians. Abundance of pool-breeding amphibians can only be used to determine the presence of a significant vernal pool during the identification period. The presence of fairy shrimp, rare species [listed in 7.b.2.], or a state-listed endangered or threatened species may be used to determine the presence of a significant vernal pool at times of the year other than the identification period.

**NOTE**: Optimal times for counting egg masses of pool-breeding amphibians vary according to geographic location and weather. For instance, during cold springs, breeding can begin as much as 2 weeks later than it does in warm, wet springs. The optimal time to count masses is just past the peak breeding period. For wood frogs, this occurs approximately 2 weeks after they start full choruses. Wood frog egg masses hatch very quickly and are difficult to count much past peak breeding. Salamanders have a more extended breeding period and their eggs do not hatch as quickly as those of wood frogs. Therefore, surveys to count salamander egg masses should be conducted slightly later in the breeding season, generally 2-3 weeks following wood frog egg mass counts. The following are rough guidelines for optimal times for counting egg masses:

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| **Geographic Region** | **Wood Frogs** | **Spotted & Blue Spotted Salamanders** |
| Northern Maine | May 5 – May 20 | May 15 – June 5 |
| Central Maine | April 25 – May 10 | May 5 - May 25 |
| Southern Maine | April 10 – April 25 | April 20 – May 10 |

Note that optimal egg mass counting dates for high elevation localities are likely to be delayed by up to one or two weeks from the suggested dates provided within each geographic region above.

8. **Geographic regions**

a. The three geographic regions used in Section 7.b.3. are as follows.

1) The Northern Maine region is approximately that part of the state north of a line extending from Rangeley to Dover-Foxcroft to Howland to Calais.

2) The Central Maine region is approximately that part of the state south of that same line and north of a line extending from Fryeburg to Augusta to Belfast.

3) The Southern Maine region is approximately that part of the state south of the line extending from Fryeburg to Augusta to Belfast.

b. The two geographic regions used in Section 7.b.5. are as follows.

1) The Northern Maine region is approximately that part of the state north of a line extending from Rangeley to Dover-Foxcroft to Howland to Calais.

2) The Southern Maine region is approximately that part of the state south of the line described immediately above.

9. **Drying**. When a vernal pool habitat has not previously been determined to be significant, and the Department of Inland Fisheries & Wildlife or the Department of Environmental Protection makes a determination concerning whether the vernal pool habitat is significant, either department may determine that the vernal pool habitat is not significant if:

a. The vernal pool is located in northern Maine and dries out after spring filling and before July 31st based on winter, spring and early summer precipitation; or

b. The vernal pool is located in southern Maine and dries out after spring filling and before July 15th based on winter, spring and early summer precipitation.

10. **Lack of permanent flowing inlet or outlet**. In order to be identified as part of a significant vernal pool habitat, the vernal pool may not have a permanent flowing inlet or outlet.

11. **Seasonality**. The Department of Environmental Protection may require an assessment of significance by a qualified individual during the identification period. In any season, indicators of a potentially significant vernal pool habitat may include flat topography with depressions or pit-and-mound topography, wetland flora, fingernail clams, caddisfly cases, and evidence of temporary flooding.

12. **Voluntary identification**. A landowner may voluntarily submit documentation to the Department of Inland Fisheries & Wildlife or the Department of Environmental Protection regarding the significance of a vernal pool on that individual’s property. Documentation must be completed by a qualified individual, or field-verified by either department prior to its inclusion on a Geographic Information System (GIS) data layer maintained by either the Department of Inland Fisheries & Wildlife or the Department of Environmental Protection. A landowner will receive written confirmation of such documentation from the Department of Environmental Protection.

13. **Verification of significance**. A significant vernal pool documented on a Geographic Information System (GIS) data layer maintained by either the Department of Inland Fisheries & Wildlife or the Department of Environmental Protection is eligible for removal from that data layer following Department verification of three consecutive years of data demonstrating that a vernal pool no longer meets the criteria in Sections 7.a.1. or 7.b.2. A written request to remove a significant vernal pool from the data layer must be submitted to both the Department of Inland Fisheries & Wildlife and the Department of Environmental Protection and include documentation made during the identification period by a qualified individual. A written determination by the Department of Environmental Protection that a vernal pool is not significant remains valid regardless of timeframe.

STATUTORY AUTHORITY: 12 M.R.S.A. §10104; 38 M.R.S.A. §480-BB

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