



Wisconsin Breeding Bird Atlas II

Habitat Codes and Definitions

| Code | Habitat Name and Description |
|-------------|---|
| F | F - FOREST: Habitats dominated by trees. Trees are at least 20 ft tall, and canopy cover is at least 50%. |
| FU | U - Upland: Upland forests on dry or moist sites. |
| FUH | H - Hardwood: Upland forests in which hardwood (broadleaf) species comprise at least 95% of the tree cover. |
| FUHa | a - aspen: Upland hardwood forests dominated by aspens (poplars) or white (paper) birch. |
| FUHm | m- maple: Upland hardwood forests dominated by maples, beech, or yellow birch. |
| FUHo | o - oak: Upland hardwood forests dominated by oaks or hickories. |
| FUHp | p - plantation: Tracts of planted hardwoods, usually fruit orchards, with greater than 50% tree cover. |
| FUC | C - Conifer: Upland forests in which coniferous (needle-leaved) species comprise at least 75% of tree cover. |
| FUCh | h - hemlock: Upland coniferous forest dominated by hemlock. |
| FUCp | p - pine: Upland coniferous forests dominated by white, red, or jack pine. [FUCp(p) = pine plantation]. |
| FUCs | s - spruce-fir: Upland coniferous forest dominated by white spruce and/or balsam fir. [FUCs(p) = spruce plantation]. |
| FUM | M - Mixed: Upland mixed hardwood-coniferous forest with 5-75% conifer component. |
| FUMh | h - hemlock-hardwood: Upland mixed forest composed primarily of hemlock and hardwoods. |
| FUMp | p - pine-hardwood: Upland mixed forest composed primarily of pines and hardwoods. [FUMp(p) = pine plantation with hardwoods comprising greater than 25% of woody cover.] |
| FUMs | s - spruce-fir-hardwood: Upland mixed forest composed primarily of white spruce or balsam fir, and hardwoods. [FUMs(p) = spruce plantation with hardwoods comprising greater than 25% of woody cover]. |
| FL | L - Lowland: Swamp or bog forests, on sites that are wet, or permanently or periodically flooded. |
| FLH | H - Hardwood: Lowland forests in which hardwood (broadleaf) species comprise at least 95% of the tree cover. |
| FLHn | n - northern: Lowland hardwood forests dominated by black ash or red maple, sometimes with yellow birch or alder. These are in the northern part of the state and in isolated sites southward. |
| FLHs | s - southern: Lowland hardwood forests dominated by silver maple, cottonwood, willow, swamp white oak, or green ash. These are usually on floodplains in the southern part of the state. |
| FLC | C - Coniferous: Lowland forests in which coniferous (needle-leaved) species comprise at least 75% of the tree cover. |
| FLCc | c - cedar: Lowland coniferous forest dominated by white cedar, sometimes with hemlock, pines, fir, spruces, or tamarack. |
| FLCs | s - spruce-tamarack: Lowland coniferous forest dominated by black spruce or tamarack. |
| FLM | M - Mixed - Lowland forests with 5-75% coniferous component. |
| FLMc | c - cedar: Lowland mixed forest with the most prevalent conifers being white cedar, hemlock, or pine. |
| FLMs | s - spruce: Lowland mixed forest with the most prevalent conifers being black spruce or tamarack. |

| Code | Habitat Name and Description |
|------------------------|---|
| S | S - SHRUB/SAVANNA: Habitats dominated by shrubs, saplings, and/or scattered trees. Total woody cover [greater than 3 ft tall] is greater than 25%, but tree cover is less than 50%. |
| SU | U - Upland: Shrub/savanna habitats on dry or moist sites. |
| SUH | H - Hardwood: Upland shrub/savanna in which hardwood species comprise at least 95% of the woody cover. |
| SUHc | c - cutover/turnover: Formerly forested upland sites that have been heavily logged or burned and are now dominated by hardwood shrubs, saplings, or scattered trees. |
| SUHh | h - hedge: Upland hedgerows composed of hardwood trees, saplings, or shrubs, located between active or former agricultural fields or other open habitats. |
| SUHn | n - natural: Upland shrub/savanna dominated by native rather than exotic plant species. Includes shrubby prairies or barrens, or native savannas with scattered oak trees; these natural habitats may be actively or formerly managed by fire or other methods of brush control. Some of these sites have been invaded by exotic or aggressive native species such as buckthorn, black locust, or leafy spurge, but remain primarily natural. If uncertain whether habitat is natural or not, designate as <i>SUH_o</i> (following). |
| SUH_o | o - oldfield: Upland sites formerly in agriculture or unknown land use, now succeeding to hardwood shrub/savanna, with a substantial component of exotic plant species, especially herbs. Structure may range from sites dominated by dense shrubs, to others with scattered, spreading oaks and no shrubs. If actively grazed, designate as <i>SUH_o(g)</i> . |
| SUH_p | p - plantation: Upland sites that have been planted to hardwoods, usually fruit trees or black walnut. Includes apple, cherry, etc. orchards, but not those with greater than 50% tree cover, which are <i>FUH_p</i> . |
| SUC | C - Conifer: Upland shrub/savanna in which coniferous species comprise at least 75% of the woody cover. |
| SUCc | c - cutover/turnover: Formerly forested upland sites that have been heavily logged or burned and are now dominated by coniferous shrubs, saplings, or scattered trees. |
| SUC_h | h - hedge: Upland hedgerows dominated by coniferous shrubs, saplings, or trees, located between active or former agricultural fields or other open habitats. |
| SUC_n | n - natural: Upland coniferous shrub/savanna dominated by native rather than exotic plant species. Includes prairies or barrens with scattered pines or red cedars; these natural habitats may be actively or formerly managed by fire or other methods of brush control. Some have been invaded by exotic and aggressive native species such as black locust or leafy spurge but remain primarily natural. If uncertain whether or not habitat is natural, designate as <i>SUC_o</i> (following). |
| SUC_o | o - oldfield: Upland sites formerly in agriculture or unknown land use, now succeeding to coniferous shrubs, saplings, or scattered trees, and with a substantial component of exotic plant species, especially herbs. If actively grazed, designate as <i>SUC_o(g)</i> . |
| SUC_p | p - plantation: Upland sites that have been planted to coniferous species, usually pines or spruces. Includes Christmas tree plantations, but not plantations with greater than 50% tree cover, which are either <i>FUC_p(p)</i> or <i>FUC_s(p)</i> . |
| SUM | M - Mixed: Upland shrub/savanna in which coniferous species comprise 5-75% of woody cover. |
| SUMc | c - cutover/turnover: Formerly forested upland sites that have been heavily logged or burned and are now dominated by mixed hardwood-coniferous shrubs, saplings, or scattered trees. |
| SUM_h | h - hedge: Upland hedgerows of mixed hardwood and coniferous shrubs, saplings, or trees, located between active or former agricultural fields or other open habitats. |
| SUM_n | n - natural: Upland mixed shrub/savanna dominated by native rather than exotic plant species. Includes prairies or barrens with many shrubs or scattered hardwoods, pines or red cedars; these natural habitats may be actively or formerly managed by fire or other methods of brush control. Some have been invaded by exotic or aggressive native species such as black locust or leafy spurge, but remain primarily natural. If uncertain whether or not habitat is natural, designate as <i>SUM_o</i> (following). |

| Code | Habitat Name and Description |
|-------------|---|
| S | S - SHRUB/SAVANNA <i>continued</i> |
| SUMo | o - oldfield: Upland sites formerly in agriculture or unknown land use, now succeeding to hardwood and coniferous shrubs, saplings, or scattered trees; with a substantial component of exotic plant species, especially herbs. If actively grazed, designate as <i>SUMo(g)</i> . |
| SUMp | p - plantation: Upland sites that have been planted to coniferous species, usually pines or spruces, but where hardwoods provide greater than 25% of woody cover. Does not include plantations with greater than 50% tree cover, which are either <i>FUMp(p)</i> or <i>FUMs(p)</i> . |
| SL | L - Lowland: Shrub/savanna habitats on sites that are wet, or permanently or periodically flooded. |
| SLH | H - Hardwood: Lowland shrub/savanna in which hardwood species comprise at least 95% of the woody cover. |
| SLHc | c - cutover/turnover: Formerly forested lowland sites that have been heavily logged or burned and are now dominated by hardwood shrubs, saplings, or scattered trees. |
| SLHh | h - hedge: Lowland hedgerows composed of hardwood trees, saplings, or shrubs, located between active or former agricultural fields or other open habitats. |
| SLHn | n - natural: Lowland shrub swamp or "shrub carr", dominated by native species such as sedges, cattails, willows, alder, or dogwoods. |
| SLHo | o - oldfield: Lowland sites formerly in agriculture or unknown land use, now succeeding to hardwood shrub/savanna; with a substantial component of exotic plant species, especially herbs. If actively grazed, designate as <i>SLHo(g)</i> . |
| SLC | C - Conifer: Lowland shrub/savanna in which coniferous species comprise at least 75% of the woody cover. |
| SLCc | c - cutover/turnover: Formerly forested lowland sites that have been heavily logged or burned and are now dominated by coniferous shrubs, saplings, or scattered trees. |
| SLCh | h - hedge: Lowland hedgerows dominated by coniferous shrubs, saplings, or trees, located between active or former agricultural fields or other open habitats. |
| SLCn | n - natural: Lowland, coniferous shrub/savanna dominated by native rather than exotic plant species. Includes bogs with scattered or stunted spruce/tamarack; sometimes with low hardwood "heath" species (e.g., leatherleaf) less than 3 ft tall. |
| SLCo | o - oldfield: Lowland sites formerly in agriculture or unknown land use, now succeeding to coniferous shrubs, saplings, or scattered trees; with a substantial component of exotic plant species, especially herbs. If actively grazed, designate as <i>SLCo(g)</i> . |
| SLM | M - Mixed: Lowland shrub/savanna in which coniferous species comprise 5-75% of woody cover. |
| SLMc | c - cutover/turnover: Formerly forested lowland sites that have been heavily logged or burned and are now dominated by mixed hardwood-coniferous shrubs, saplings, or scattered trees. |
| SLMh | h - hedge: Lowland hedgerows of mixed hardwood and coniferous shrubs, saplings, or trees located between active or former agricultural fields or other open habitats. |
| SLMn | n - natural: Lowland, mixed shrub/savanna dominated by native rather than exotic plant species. Includes bogs with scattered or stunted spruce/tamarack and substantial cover of hardwood shrubs or saplings such as alder, bog birch, or red maple and black ash. If hardwood component is less than 3 ft tall (generally "heath" species such as leatherleaf), consider the habitat coniferous (SLCn) rather than mixed. |
| SLMo | o - oldfield: Lowland sites formerly in agriculture or unknown land use, now succeeding to hardwood and coniferous shrubs, saplings, or scattered trees; with a substantial component of exotic plant species, especially herbs. If actively grazed, designate as <i>SLMo(g)</i> . |

| Code | Habitat Name and Description |
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| O | O - OPEN: Open habitats dominated by herbaceous plants, exposed soil, woody vegetation less than 3 ft tall, or open water. Less than 25% woody cover greater than 3 ft tall. |
| OU | U - Upland: Open habitats on dry or moist sites. |
| OUA | A - Agriculture: Upland agricultural habitats. |
| OUAa | a - alfalfa: Hay with greater than 50% legumes (alfalfa, clover, or trefoil) component, and which has or will probably be harvested. |
| OUAg | g - grass or mixed hay: Hay with less than 50% legume component, and which has or will probably be harvested. |
| OUAc | c - cultivated: Recently plowed or cultivated fields, either planted or unplanted, in which crops are less than 8 inches tall. |
| OUAp | p - pasture: Actively grazed, open habitat. |
| Ouar | r - row crops: Corn, soybeans, potatoes, or other row crops, greater than 8 inches tall. |
| OUs | s - small grains: Small grains such as oats, wheat, rye, and barley. |
| OUAx | x - miscellaneous: Includes specialty crops such as vegetables or herbs. |
| OUN | N - Native: Open habitats dominated by native rather than exotic plant species. Includes upland prairies and open barrens. If uncertain whether habitat is native or non-native, designate as OUU (following). |
| OOU | U - Uncropped: Open habitats with substantial component of exotic species, which have not been, or will probably not be, cropped in the current year. Includes oldfields with less than 25% woody cover, agricultural set-aside fields dominated by grasses, legumes, or weedy forbs, and grasses planted for wildlife. Uncropped grassy fields can often be distinguished from cropped hayfields by the presence of dead standing stems from the previous year. Hayfields, if they are to be cut, are almost always cut by late June. If uncertain whether a field is to be cropped or not, designate as hay (<i>OUAa</i> or <i>OUAg</i>). |
| OL | L - Lowland: Open habitats on sites that are wet, or permanently or periodically flooded. |
| OLA | A - Agriculture: Lowland agricultural habitats. |
| OLAa | a - alfalfa: Hay with greater than 50% legumes (alfalfa, clover, or trefoil) component, and which has or will probably be harvested. |
| OLAg | g - grass or mixed hay: Hay with less than 50% legume component, and which has or will probably be harvested. |
| OLAc | c - cultivated: Recently plowed or cultivated fields, either planted or unplanted, in which crops are less than 8 inches tall. |
| OLAp | p - pasture: Actively grazed, open habitat. |
| OLAr | r - row crops: Corn, soybeans, potatoes, or other row crops, greater than 8 inches tall. |
| OLAs | s - small grains: Small grains such as oats, wheat, rye, and barley. |
| OLAx | x - miscellaneous: Includes specialty crops such as vegetables or herbs. |
| OLN | N - Native: Open habitats with less than 25% exposed, open water, dominated by native rather than exotic plant species. If uncertain whether habitat is native or non-native, designate as <i>OLU</i> (following). |
| OLNm | m- meadow: Sedge meadow or prairie. |
| OLNb | b - bog: Open bogs, generally in sterile or acidic conditions and often on a floating mat of peat, usually dominated by sphagnum moss, "wiregrass" sedges, or low "heath" species such as leatherleaf; often contain scattered, stunted black spruce or tamarack (less than 25% cover). Found in northern Wisconsin and in isolated sites southward. |

| Code | Habitat Name and Description |
|-------------|--|
| O | O - OPEN <i>continued</i> |
| OLU | U - Uncropped: Open habitats with substantial component of exotic species, which have not been, or will probably not be, cropped in the current year; and with less than 25% open water. Includes oldfields with less than 25% woody cover, agricultural set-aside fields dominated by grasses, legumes, or weedy forbs, and grasses planted for wildlife. Uncropped grassy fields can often be distinguished from cropped hayfields, by the presence of dead standing stems from the previous year. Hayfields, if they are to be cut, are almost always cut by late June. If uncertain whether a field is to be cropped or not, designate as hay (<i>OUAa</i> or <i>OUAg</i>). |
| OLW | W - Water/wetland: Open habitats with greater than 25% cover of open water (not overhung by vegetation). |
| OLWm | m- marsh: Wetlands with greater than 25% cover of emergent plants such as cattail, bulrushes, or sedges (where water greater than 25% cover only), sometimes with exposed mud flats. |
| OLWI | l - lake: Bodies of water with less than 25% cover of emergent plants; with or without submergent or floating plants such as water lilies or pondweeds. Also, the immediate shores of these lakes. |
| OLWr | r - river or stream: Watercourses at least 20 ft wide, with less than 25% cover of emergents, less than 25% cover woody vegetation, and greater than 25% cover open water (not overhung by vegetation). Also, the immediate shores of these watercourses. Species found along smaller streams should be considered in the surrounding habitat type, with "stream" added as a special feature. |

| Code | Habitat Name and Description |
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| U | U - URBAN/RURAL: Cities, villages, farmsteads, and rural homes. |
| UU | U - Urban: Cities with populations over 10,000, including suburbs with smaller populations. |
| UUC | C - Commercial/industrial: Sections of cities dominated by shops, shopping centers, warehouses, factories, etc. |
| UUR | R - Residential: Sections of cities dominated by single- or multiple-family homes or apartments. |
| UOO | O - Open Space: Urban parks, public greenspace, golf courses, railroad rights-of-way, etc. Do not include any tract of a single major habitat type (e.g., upland forest, agriculture, marsh) larger than 20 acres; designate these by their appropriate code, as if they were non-urban. Mowed areas and linear habitats (e.g., isolated, narrow streamside woods or RR rights-of-way) in urban settings are considered <i>UOO</i> regardless of size or length. |
| UUX | X - Miscellaneous urban habitats: Quarries, major highways and interchanges, etc. |
| US | S - Small Town: Villages and small cities with fewer than 10,000 people, and not connected to larger cities. |
| USC | C - Commercial/industrial: Sections of small towns dominated by shops, shopping centers, warehouses, factories, feed mills, etc. |
| USR | R - Residential: Sections of small towns dominated by single- or multiple-family homes or apartments. |
| USO | O - Open Space: Small town parks, public greenspace, golf courses, railroad rights-of-way, etc. Do not include any tract of a single major habitat type (e.g., upland forest, agriculture, marsh) larger than 20 acres; designate these by their appropriate code, as if they were non-urban. Mowed areas and linear habitats (e.g., isolated, narrow streamside woods or RR rights-of-way) in small-town settings are considered <i>USO</i> regardless of size. |
| USX | X - Miscellaneous small town habitats: Quarries, major highways or interchanges, etc. within small towns. |
| UR | R - Rural: The immediate surroundings of rural homes, shops, farm outbuildings, and their yards. |
| URC | C - Commercial/industrial: Factories, industrial parks, feed mills, shops, shopping centers, warehouses, etc. outside of cities and villages. |
| URR | R - Residential: Farmsteads and non-farm homes, including outbuildings and yards. |
| URO | O - Open Space: Rural parks (mowed), playing fields, golf courses, and other mowed recreational areas. |
| URX | X - Miscellaneous rural habitats: Quarries, major highways and interchanges, mines, etc. outside of cities or villages. |