Woodbine Conservancy Area

Follow up and Management

Wildlife Habitat Management

Wildlife habitat is, in a basic sense, the place where the needs of wildlife are contained. In other words a place that they can get food, water and shelter. These requirements can be further broken down into categories such as needing places for roosting, breeding, nesting, foraging, brood rearing, etc. While this may seem an undaunting task to fulfill, just providing basic habitat conditions without specifying these particular areas is fine. So to make it simple we provide grassland areas for grassland species and woodland/shrub areas for species that use these areas. The wildlife will find the niche to fulfill their needs.

This plan will provide the information needed to explain what quality grassland and woodland habitat should be. It will also list maintenance/management practices that will help maintain the health of these habitats and suggestions for monitoring the habitat and wildlife. There will also be a section explaining the best way to maintain proper cover and dispersion needs within a developed setting such as the Woodbine subdivision. And as always, where people and wildlife mix, there will be conflicts. There will be material provided that will help avoid and resolve possible problems that typically occur.

Grassland Habitat

Just as there are many requirements within any particular habitat (nesting, brood rearing, foraging, etc.), you will find that each wildlife specie has varying and particular requirements also. Unless you have several hundred acres, do not try to provide all things for all species.

Typically, a quality grassland should have an equal mix of grasses and broadleaf plants (forbs) of multiple species within the field. In addition, the stand should be fairly open. Dense stands of grasses restrict wildlife movement and are used by very few species.

As grassy habitats mature, you will see two things occur. First, the plant specie diversity will disappear. Second, the grasses will become dense, sod bound and lose vigor. These problems can be easily remedied by prescribed burning, light discing or properly timed mowing. Refer to the attached job sheets for practice specifics.

Your property contains both native prairie plantings and introduced cool season grasses. Each has specific and differing management needs. As an example, native plants thrive with fire, while introduced cool seasons do not. However, cool seasons can and should be burned under the right conditions.

Much of grassland management revolves around keeping the woody vegetation out of it. Both non-native and native trees and shrubs. Of course, in fields larger than 40 acres, a few clumps of native shrubs can be beneficial. Songbirds will use them for nesting, perching, roosting and protection from inclement weather.

Woody Habitats

Woody habitats include maturing stands of deciduous trees, shrub lands and savannah or savannah like areas. Your property contains all of these. A stand of large maturing trees is characterized by multiple canopy layers, ; i.e. a main canopy of oak, hickory, maple, black cherry, etc., a secondary canopy consisting of redbud, flowering dogwood, haw, etc., and a shrubby layer of pawpaw, gooseberry and various vines.

Many woodlands, like yours, have been pastured some where along the way. This results in a few mature trees and a young, dense understory of brush. Over the past several years, much of this brushy layer has been removed and you can move on to the next phase.

As the undesirables are removed, this will open the stand and result in more sunlight reaching the ground. Immediately there are plants that spring up, but are not necessarily wanted. This is the time where exotics such as bush honeysuckle and autumn olive creep in. These areas should be gone over to remove the undesirable planting using a combination of cutting and herbicide application. When this is done, you may interplant the trees and shrubs that you want to see in your woodlands. In this situation, I would recommend using RPM plants as provide by Forrest Keeling Nursery. They are a little expensive, but they are a bigger plant giving a higher survival rate and quicker results.

Exotic and other Undesirable Plants

Much of the property has exotic species on it and is unavoidable. They tend to out compete native vegetation and are less attractive to wildlife. Species such as autumn olive, bush honeysuckle, sweet clover, multiflora rose, teasle and garlic mustard are notorious in this area. Even native plants can be a nuisance in the wrong place. Monitor habitats and make sure what is suppose to be there is there and remove what is not supposed to be there. Look for the information for control unwanted vegetation that is enclosed in this packet.

Monitoring

Monitoring the health of your habitat and the wildlife using it can be done through simple observation. A complex system of transects and point counts are not necessary in this situation. To monitor habitat simply keep track of what species are there. Is it what should be there or have undesirable species begun encroaching? Is the overall appearance and vigor of the plants as it should be or are they declining? Are you still seeing the same amounts and species of wildlife? If not, there is probably something going on with the habitat conditions. As habitat matures some components change. As such, some wildlife will no longer find it suitable. However, other wildlife species may find it to their liking and move in. A change is usually noted over a period of time. Don't make any conclusions after a one time observation.

If you find it desirable for a structured monitoring system you may also do this. For both habitat and wildlife monitoring set up a path through the various habitat types. Make sure it is such, that you can follow the exact same path for subsequent surveys. Lay out metered points along the path. Usually a consistent measured distance works well. This insures that points are randomly picked and no skewing of data will occur. For habitat monitoring, simply stop at your predetermined points and observe all species within your visual ability. For wildlife, follow your path also stopping at predetermined stations. Look and listen for a predetermined time. Usually about 2 or 3 minutes. Record what you see or hear and move on. Wildlife surveys are best done on clear, calm days right around sun rise.

Development

As houses are built and yards are developed, habitat will be lost. Adequate amounts of quality habitat are what attracts wildlife. Loss of habitat is never good for maintaining high populations of wildlife. However, some species adapt well and thrive in close proximity to residential areas. There are points that can be followed to minimize negative impacts of development. Also, keep in mind that it would be a waste of time and money to do a lot of habitat work in an area that will be lost in a year or two.

First, avoid fragmenting habitat. Wildlife populations respond best when habitat is provided either in a large block or is at least connected by travel corridors. This can be done by limiting set back from the road and leaving the habitat (grassland or woodland) intact and spread across the back of each lot. If this is unavoidable, plan for travel corridors that connect larger areas of habitat. These corridors, either grass or woody vegetation, should be at a minimum 60 feet wide. Connections to commons areas or places unsuitable for development are good examples.

Make sure pets are under control. Dogs and cats love to chase wildlife. Unfortunately, the wildlife usually losses. Nesting can be disrupted, young lost or actual death may occur from direct contact with the pet or stress from the chasing. Studies have shown time and again that wildlife predation can be higher from domestic cats than from natural predators. Cats kill continually for fun, while predators only kill when hungry.

Encourage home owners to use native plants or design their landscaping to benefit wildlife. Most people enjoy watching birds and well designed landscaping can attract many species of birds.

Avoiding Conflicts with Wildlife

In a place such as Woodbine, there will inevitably be frequent interactions with wildlife. Most should be good, but there will always be the potentials for problems. Most conflicts with wildlife can be avoided if the homeowner acknowledges this potential and exhibits a certain amount of tolerance from the beginning. Taking steps to avoid these conflicts may avoid a negative wildlife encounter from happening at all.

Begin by making sure the house is well maintained to keep wildlife out. These problems usually occur in older neighborhoods and older houses. Keep garbage secure by placing garbage cans in secured pens. Use raccoon and squirrel proof feeders. Metal guards may be placed on poles to help. Also keep spilled seed cleaned up from around the feeder. Also, do not set up feeding stations for animals other than birds. Animals become dependent on it and cause them to lose their natural fear of humans. It should also be noted that feeding deer is illegal due to disease problems within the state.

An information sheet is provided that lists most common wildlife problems. Also there is a web site from the Illinois Extension Service that helps deal with wildlife issues. The address is web.extension.illinois.edu/wildlife/ and is called Living With Wildlife.

Name Sally Fletcher

Date 7/15/10 Tract ______

[ ] GRASSLAND PROTECTION WITH TILLAGE

Practice Overview: Limit disturbances and maintain or enhance other selected components in grassland habitat with a tillage rotation. This practice may be used in any grassy or grassy wetland cover type whether planned or existing. Apply all criteria for planning units of 10 acres or less.

FIELD	ACRES	TYPE	STATUS	MANAGEMENT UNIT	ROTATION

TYPE = Cool Season, Warm Season, or Old Field Grassy Cover

MANAGEMENT UNIT = whole Field(s), or designated size Patch(es) or Strip(s)

STATUS = grassland type(s) is Planned or Existing

ROTATION = Specify timing of treatment for unit

Habitat Disturbance Criteria: While disturbances such as prairie fires are normal in grasslands, others such as excessive mowing, vehicle use or livestock grazing can be harmful. Control disturbances as stated below. Do not exceed stated limits, *except* as prescribed for wildlife management or compatible purposes.

1) GRAZING, HAYING, BURNING, PESTICIDE USE, ARTIFICIAL FLOODING - Not allowed.
2) MOWING or TILLAGE - Not allowed except up to 5% allowed for paths or firelanes (<20' wide), or mowing as needed to establish grassy cover.
3) DEVELOPMENT - Area <100' from a building or developed site does not qualify.
4) OTHER - ______

[ ] Disturbance Control is Satisfactory

[ ] Corrective Action is Needed (detail) ______

Habitat Component Criteria: Additional management may be needed if: 1) enhanced habitat quality is desired, 2) special management action is planned, 3) wetland conditions exist, 4) special landuse regulations apply, 5) endangered or threatened species are present. Apply criteria for the Habitat Components as indicated. Help from a biologist or other resource professional may be needed. Condition(s) Requiring Special Planning: ______

[ ] Successional Stage Do not allows grass stands to become thick and sod bound.

[ ] Plant Species Diversity In cool season grass maintain a clover/alfalfa component. In prairie stands manage to encourage forbs (broadleaf plants).

[ ] Vegetation Height ______

[ ] Water Management ______

[ ] Other ______

Name Sally Fletcher Tract ______ Date 7/15/10

Grassy Cover Management: Grasslands need periodic management. Needs may include control of woody plant invasion, or control of dead plant material (litter) build-up which may hinder movement by wildlife. Also, plant diversity may need management to provide forage, seeds, insects, perch sites, etc.

Tillage Specifications: Avoid soil erosion. Use Tillage as described in General Tillage Guidelines below to:

[X] Manage Cool Season Grassy Cover or,
[X] Manage Warm Season Grassy Cover. Light tillage prevents litter buildup and increases legumes and annual plants. Light tillage may not prevent woody plant invasion. Hand removal, herbicide treatment, delayed mowing, or prescribed burning may be specified when woody plants need control. Heavy tillage creates bare soil areas, but will convert most cool and warm season grassy covers to "old fields". Thus, do not rotate locations of bare soil areas. Light tillage may open prairie stands to invasion by weeds. Tillage should be done in late July through early August. Follow up immediately by planting medium red clover at 10-15 lbs. per acre

[ ] Manage Old Field Grassy Cover. Heavy tillage controls woody plant invasion and creates bare soil areas. Light or heavy tillage prevents litter buildup and increases annuals and legumes. Tillage operations in "old field" may be planned to provide a balance of areas with bare soil and annual or perennial species.

General Tillage Guidelines: Apply the following as indicated:

X Rotational Management: Leave at least 50% of grassland habitat undisturbed each year. Some standing cover is needed year-round by wildlife. Divide grasslands into units. Till each unit before excessive litter accumulates, or woody stems grow too large, usually once every 5-10 years. Rotate the treatment of units to get complete coverage in the desired number of years. (Treatment may include delayed mowing and prescribed burning also).

__ Light tillage (with disk): Till until 25% of soil surface is exposed (75% is covered with vegetation).

__ Heavy tillage (with plow or disk): Till until at least 90% of soil surface is exposed (less than 10% is covered with vegetation).

__ Tillage Dates: Till at any time of the year, but do not initiate tillage in new areas during the nesting season. Tillage from September through February may be best to promote most desirable annual plants or legumes for seed or insect production purposes. Maintain bare ground strips to promote quail nesting from at least April through July.

Name Sally Fletcher

Date 7/15/10 Tract ______

[ ] GRASSLAND PROTECTION WITH DELAYED MOWING

Practice Overview: Limit disturbances and maintain or enhance other selected components in grassland habitat with a delayed mowing rotation. This practice may be used in any grassy or grassy wetland cover type whether planned or existing. Apply all criteria for planning units of 10 acres or less.

FIELD	ACRES	TYPE	STATUS	MANAGEMENT UNIT	ROTATION

TYPE = Cool Season, Warm Season, or Old Field Grassy Cover
MANAGEMENT UNIT = whole Field(s), or designated size Patch(es) or Strip(s)

STATUS = grassland type(s) is Planned or Existing
ROTATION = Specify timing of treatment for unit

Habitat Disturbance Criteria: While disturbances such as prairie fires are normal in grasslands, others such as excessive mowing, vehicle use or livestock grazing can be harmful. Control disturbances as stated below. Do not exceed stated limits, *except* as prescribed for wildlife management or compatible purposes.

1) GRAZING, HAYING, BURNING, PESTICIDE USE, ARTIFICIAL FLOODING - Not allowed.
2) MOWING or TILLAGE - Not allowed except up to 5% allowed for paths or firelanes (<20' wide), or mowing as needed to establish grassy cover.
3) DEVELOPMENT - Area <100' from a building or developed site does not qualify.
4) OTHER - ______

[ ] Disturbance Control is Satisfactory

[ ] Corrective Action is Needed (detail) ______

Habitat Component Criteria: Additional management may be needed if: 1) enhanced habitat quality is desired, 2) special management action is planned, 3) wetland conditions exist, 4) special landuse regulations apply, 5) endangered or threatened species are present. Apply criteria for the Habitat Components as indicated. Help from a biologist or other resource professional may be needed.

Condition(s) Requiring Special Planning: ______

[ ] Successional Stage ______

[ ] Plant Species Diversity ______

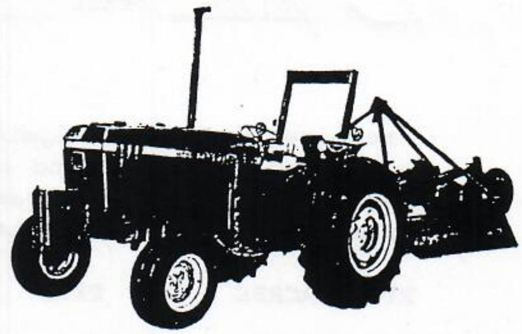
[ ] Vegetation Height ______

[ ] Water Management ______

[ ] Other ______

Name Sally Fletcher Tract ______ Date 7/15/10

Grassy Cover Management: Grasslands need periodic management. Needs may include control of woody plant invasion, or control of dead plant material (litter) build-up which may hinder movement by wildlife. Also, plant diversity may need management to provide forage, seeds, insects, perch sites, etc.



Delayed Mowing Specifications: Used properly, mowing can be beneficial, but excessive mowing is expensive, damages habitat, and kills wildlife. (Delayed Mowing is not a control measure for noxious weeds.) Use Delayed Mowing as described in General Mowing Guidelines below to:

[X] Manage Cool Season Grassy Cover. Mowing controls woody plant invasion, but favors perennial grasses. Legumes will decrease and litter will increase. Light tillage or prescribed burning may be specified if these are concerns.

[X] Manage Warm Season Grassy Cover. Mowing controls woody plant invasion, but favors perennial grasses. Forbs will decrease and litter will increase, and cool season plants may invade. Prescribed burning may be specified if these are concerns. Herbicide treatment or special mowing dates may be specified for selective use on cool season species or broadleaf weeds. Mow at about a 1 foot height.

[X] Manage Old Field Grassy Cover. Mowing controls woody plant invasion, but favors perennial grasses. Annuals (which produce abundant seeds) and legumes will decrease, and litter will increase. Tillage or prescribed burning may be specified if these are concerns.

General Mowing Guidelines: Apply the following as indicated:

X Rotational Management: Leave at least 50% of grassland habitat undisturbed each year. Some standing cover is needed year-round by wildlife. Divide grasslands into units. Mow each unit before woody stems grow too large, usually once every 2-4 years. Rotate the treatment of units to get complete coverage in the desired number of years. (Treatment may include tillage and prescribed burning also).

X Mowing Dates: Mow once. Avoid mowing in the nesting season and in winter, but time mowing to maintain or enhance desirable vegetation. The ranges of acceptable mowing dates are:

__ Cool Season Grassy Cover August 1 - September 15
__ Warm Season Grassy Cover September 1 - October 15 to control
__ Old Field Grassy Cover woody plants

X Mowing Height: Mow as high as your goal will allow. Recommendation is: 6-10 in. on Cool Seasons 12+ in. on warm season (prairie)

Name Sally Fletcher

Date 7/15/10 Tract ________

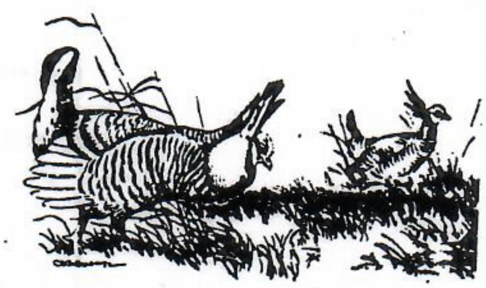
[ ] GRASSLAND PROTECTION WITH PRESCRIBED BURNING

Practice Overview: Limit disturbances and maintain or enhance other selected components in grassland habitat with a prescribed burning rotation. This practice may be used in any grassy or grassy wetland cover type whether planned or existing. Apply all criteria for planning units of 10 acres or less.

FIELD	ACRES	TYPE	STATUS	MANAGEMENT UNIT	ROTATION

TYPE = Cool Season, Warm Season, or Old Field Grassy Cover
MANAGEMENT UNIT = whole Field(s), or designated size Patch(es) or Strip(s)
STATUS = grassland type(s) is Planned or Existing
ROTATION = Specify timing of treatment for unit

Habitat Disturbance Criteria: While disturbances such as prairie fires are normal in grasslands, others such as excessive mowing, vehicle use or livestock grazing can be harmful. Control disturbances as stated below. Do not exceed stated limits, *except* as prescribed for wildlife management or compatible purposes.



1) GRAZING, HAYING, BURNING, PESTICIDE USE, ARTIFICIAL FLOODING - Not allowed.
2) MOWING or TILLAGE - Not allowed except up to 5% allowed for paths or firelanes (<20′ wide), or mowing as needed to establish grassy cover.
3) DEVELOPMENT - Area <100′ from a building or developed site does not qualify.
4) OTHER - ________

[ ] Disturbance Control is Satisfactory

[ ] Corrective Action is Needed (detail) ________

Habitat Component Criteria: Additional management may be needed if: 1) enhanced habitat quality is desired, 2) special management action is planned, 3) wetland conditions exist, 4) special landuse regulations apply, 5) endangered or threatened species are present. Apply criteria for the Habitat Components as indicated. Help from a biologist or other resource professional may be needed.
Condition(s) Requiring Special Planning: ________

[ ] Successional Stage ________

[ ] Vegetation Height ________

[ ] Plant Species Diversity ________

[ ] Water Management ________

[ ] Other ________

Name Sally Fletcher Tract ______ Date 7/15/10

Grassy Cover Management: Grasslands need periodic management. Needs may include control of woody plant invasion, or control of dead plant material (litter) build-up which may hinder movement by wildlife. Also, plant diversity may need management to provide forage, seeds, insects, perch sites, etc.

Prescribed Burning Specifications: Used properly, fire is a safe and economical tool, but careless burning can threaten life and property. See additional information supplied with this plan. Then use Prescribed Burning as described in General Burning Guidelines below to:

[X] Manage Cool Season Grassy Cover. Dormant season burning prevents litter buildup. Control of woody plants by burning after they break dormancy is not practical without damaging cool season grassy cover. Hand removal, herbicide treatment, or delayed mowing may be prescribed when woody plants need control.

[X] Manage Warm Season Grassy Cover. Late spring burning prevents litter buildup, and controls woody plant and cool season grass invasion. If used frequently, perennial grasses will increase and forbs will decrease. Occasional early spring burning prevents litter buildup and increases forbs, but will not control woody plants.

[ ] Manage Old Field Grassy Cover. Late spring burning prevents litter buildup, and controls woody plant and cool season grass invasion. If used frequently, perennial grasses will increase, and annuals and legumes will decrease. Occasional early spring burning prevents litter buildup and increases annuals and legumes, but will not control woody plants.

General Burning Guidelines: Apply the following as indicated:

X Rotational Management: Leave at least 50% of grassland habitat undisturbed each year. Some standing cover is needed year-round by wildlife. Divide grasslands into units. Burn each unit before excessive litter accumulates, or woody stems grow too large, usually once every 5-10 years. Rotate the treatment of units to get complete coverage in the desired number of years. Burning the same unit in consecutive years may be specified for control of woody plant invasion. (Treatment may include delayed mowing and tillage also).

__ Prescribed Burning Dates: The ranges of acceptable burning dates are:

X Cool Season Grassy Cover February 15 - March 31.
X Warm Season Grassy Cover February 15 - April 15
__ Old Field Grassy Cover

Name Sally Fletcher

Date 7/15/10 Tract ______

[x] WOODLAND PROTECTION WITH TIMBER MANAGEMENT

Practice Overview: Limit disturbances and maintain or enhance other selected components in woodland habitat when timber production activities are planned. This practice may be used in any woody or wooded wetland cover type whether planned or existing. Apply all criteria for planning units of 10 acres or less.

FIELD	ACRES	TYPE	STATUS	FIELD	ACRES	TYPE	STATUS

TYPE = Deciduous or Evergreen Woodland, Shrub Thicket or Border, Wildlife Fencerow STATUS = woodland type(s) is Planned or Existing

Habitat Disturbance Criteria: While disturbances such as storm "damage" are normal in woodlands, others such as excessive cutting, vehicle use or livestock grazing can be harmful. Control disturbances as stated below. Do not exceed stated limits, *except* as prescribed for wildlife management or compatible purposes.

1) BURNING, PESTICIDE USE, ARTIFICIAL FLOODING, CUTTING - Not allowed.
2) MOWING, TILLAGE, GRAZING - Not allowed except ≤5% for paths, firelanes or access lanes (<20' wd) or mowing or tillage needed to establish woody cover.
3) DEVELOPMENT - Area <100' from a building or developed site does not qualify.
4) OTHER - ______

[ ] Disturbance Control is Satisfactory

[ ] Corrective Action is Needed (detail) ______

Habitat Component Criteria: Additional management may be needed if: 1) enhanced habitat quality is desired, 2) special management action is planned, 3) wetland conditions exist, 4) special landuse regulations apply, 5) endangered or threatened species are present. Apply criteria for the Habitat Components as indicated. Help from a biologist or other resource professional may be needed.
Condition(s) Requiring Special Planning: Timber management.

[ ] Successional Stage ______

[X] Plant Species Diversity
MAINTAIN AT LEAST 5 TREE, SHRUB, OR WOODY VINE SPECIES WHICH EXHIBIT NOT LESS THAN 2.5% CANOPY COVER EACH & NO ONE OF WHICH IS GREATER THAN 90%.

[X] Mast Production
MAINTAIN AT LEAST 90% CANOPY COVERAGE FOR HARD MAST SPECIES ; AND AT LEAST 10% CANOPY COVERAGE FOR SOFT MAST SPECIES.

[X] Snags and Den Trees MAINTAIN PER ACRE —
SNAGS - 1 < 10" DBH 2 10"-20" DBH
DENTREES - 1 < 10" DBH 2 10"-20" DBH 1 > 20" DBH
RESERVE, 1 < 10" DBH 2 10"-20" DBH 1 > 20" DBH

[X] Logs DO NOT REMOVE LOGS > 6" IN DIAMETER FROM AT LEAST 50% OF AREA.

[X] Vines LEAVE NATIVE VINES, EXCEPT ON CROP TREES.

[ ] Water Management ______

[ ] Other ______