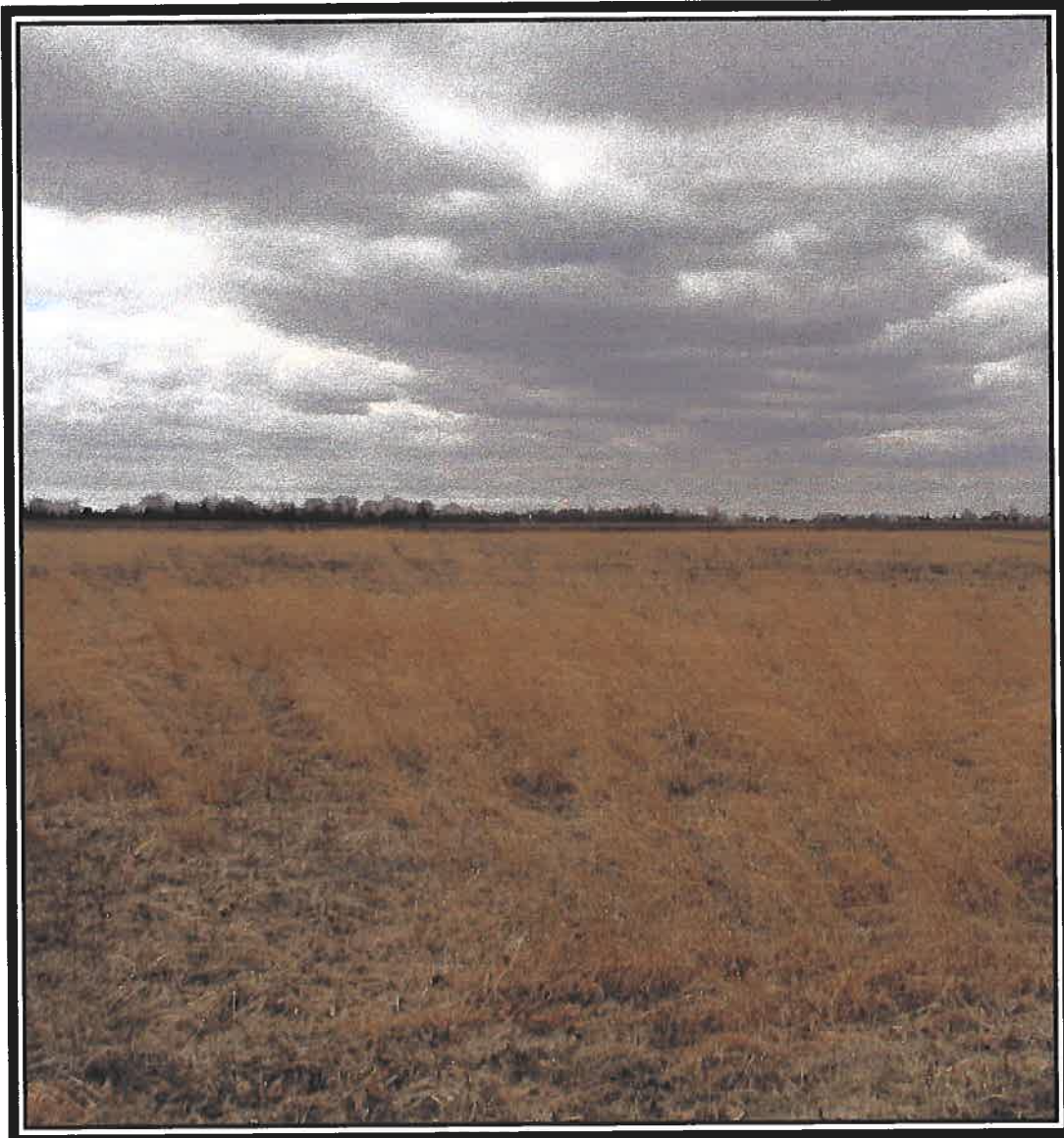


# Grasslands

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SOLBERG AIRPORT, VIEWED FROM LIGHTFIELD ROAD



## CHARACTERISTIC FLORA AND FAUNA OF GRASSLANDS IN READINGTON TOWNSHIP

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### BIRDS

upland sandpiper, bobolink, grasshopper sparrow, savannah sparrow, vesper sparrow, short-eared owl (winter), northern harrier (winter), meadow lark, american kestrel

### MAMMALS

woodchuck, coyote, red fox

### INVERTEBRATES

grasshopper spp., bee and wasp spp.

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### Bobolink

A bird of open grassland habitats; threatened status in NJ; returns in Spring to nest in large (20-50+ acres) expanses of grassland; delaying mowing of hayfields to the end of July allows nestling to fledge; eats insects and seeds; song is a bubbly, rollicking “bob-o-bob-o-lincoln,” often given in-flight or from a perch adjacent to the grassland area; male may sing daily from same perch for several weeks.



BOBOLINK



GRASSHOPPER  
SPARROW

### Grasshopper sparrow

Like the bobolink, a grassland bird of threatened status in NJ; more often heard than seen; its song is an insect-like buzz given from among long grass or weeds; depends on large open areas; mowing after late-July will allow nestlings to fledge.





UPLAND SANDPIPER

### Upland sandpiper

NJ endangered species; While not currently known to nest in Readington, this relatively large grassland bird can be spotted here during migration, feeding in large expanses of cropfields and grasslands such as those existing at Solberg airport; Winters in southern South America and arrives in NJ in mid-April; mating song is a beautiful, haunting melody, audible over long distances; often sung from fence posts.

### Northern harrier

A winter resident in Readington; also seen during Spring and Fall migration, on the way to its nesting grounds on coastal marshes; relatively large raptor of open grassland habitats; flies low over field with a slow “rowing” motion of wings; often hovering before pouncing on prey; eats primarily field rodents. Grasslands with high winter vole populations, such as the lands of Illva Saronno in Readington, will attract many harriers.



NORTHERN HARRIER

### Savannah sparrow

NJ threatened species which nests in Readington in low numbers; nests in lush, moist, open fields with little bare ground; nest is a grass cup within a natural or excavated depression, so that rim of cup is flush with ground; nest further concealed by overhanging vegetation, although many such nests are destroyed by agricultural operations; eats mostly insects and grass seed; often found nesting in same fields as Bobolink.



SAVANNAH SPARROW

### Vesper sparrow (*pictured next page*)

NJ endangered species, which may occasionally nest in Readington; prefers open fields with bare soil, such as cultivated cropland; cup nests in excavated depression and concealed by dead vegetation are often destroyed by agricultural operations; eats insects and seeds; requires no standing water for drinking or bathing, and takes frequent dust baths.



VESPER SPARROW  
*(text previous page)*



MEADOWLARK



SHORT-EARED OWL

### **Meadowlark**

Nests in open fields and pastures ; Common nester in Readington, however many nests destroyed by mowing of hayfields; makes grass-lined nest in a depression, and weaves a concealing dome overtop with grass; male courtship dance involves pointing bill skyward while jumping up and down to display brilliant yellow and black breast plumage; call is a beautiful, high-pitched "tee-you tee-yrr."

### **Short-eared owl**

Winter resident of Readington; often seen with harriers, hunting over fields with high winter vole populations; unlike most owls, hunts during daylight hours; roosts on ground, often in large communal groups during the winter.



**ROUGH-LEGGED HAWK**

### **Rough-legged hawk**

This relatively rare winter visitor to NJ can be seen on open grasslands in Readington, most commonly at Solberg Airport; Similar size to related red-tailed hawk, but has wider wingspan; hunts rodents in open grassland habitat, often by hovering; name refers to feathers which extend all the way to the toes, an adaptation its cold arctic nesting territory.

### **Little Bluestem**

This native grass gives the beautiful golden brown color to grasslands through the winter months; grows in clumps approximately three feet high; a “warm-season” grass which blooms during the hot weeks of late summer/early autumn; produces small feathery seeds relished by many birds; serves as host plant for caterpillars of the NJ-endangered Argos skipper butterfly.



**LITTLE BLUESTEM**



**GRASSHOPPER**



**WOODCHUCK**



**COYOTE**

# Wetlands, Streams, and Rivers

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WETLAND HABITAT IN BLOCK 53, DESTROYED IN 1999.



## CHARACTERISTIC FLORA AND FAUNA OF WETLAND, STREAM, AND RIVER HABITATS IN READINGTON TOWNSHIP

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### CANOPY TREES

oak (pin, swamp white), maple (red, silver, box-elder), black willow, green ash, bitternut hickory, elm (American, slippery), black walnut, butternut, black gum, American sycamore

### SHRUBS

dogwood (silky, gray), spicebush, pussy willow

### VINES

grape (fox, etc.), poison ivy, virginia creeper

### HERBS

skunk cabbage, common rush, pickerelweed, arrow arum, tussock sedge, jewelweed, paniced tick-tre-foil, swamp milkweed, blue-eyed grass, woolgrass, reed canary grass, phragmites, lizard's tail, white water lily

### FERNS

cinnamon fern, sensitive fern, ostrich fern

### MOSSES AND LICHENS

sphagnum moss

### MAMMALS

muskrat

### BIRDS

great blue heron, green heron, spotted sanpiper, kingfisher, wood duck, bald eagle, Louisiana waterthrush, red winged blackbird

### HERPETILES

wood turtle, box turtle, painted turtle, snapping turtle, musk turtle, pickerel frog, green frog, bull-frog, spring peeper, northern leopard frog, two-lined salamander, long-tailed salamander, northern water snake, ribbon snake

### INVERTEBRATES

dragonflies, damselflies, mayflies, stoneflies, cad-disflies, Dobsonflies







**SILVER MAPLE LEAVES**

**Silver maple**

This wetland maple can be found on streambanks and floodplains throughout Readington; underside of heavily-lobed leaves have a silvery sheen; fast growing, often the largest tree in an area in both height and girth; the largest tree in New Jersey is currently a silver maple.

**Silky dogwood**

Wetland member of the dogwood family; valuable to both wildlife and ecological health of water courses; berries provide food for many species of wildlife in Fall; roots stabilize vulnerable wetland or stream-bank soil, thus preventing erosion; new growth is a beautiful deep-red color.



**SILKY DOGWOOD**

**Skunk cabbage**

One of the first flowers to bloom in the Spring; Flower buds actually produce heat in late Winter to melt snow around them, giving it a jump on the Spring season; flower smells fetid (often likened to rotting flesh) in order to attract early-season pollinators, most of which are flies; can be found in wooded wetlands and wet stream-side areas within the township; especially striking in early summer after large, spreading leaves have fully formed.



**SKUNK CABBAGE**

**Sensitive fern**

This attractive wetland fern is found throughout Readington in wet fields, streamsides, and wet woodlands; name comes from plant's susceptibility to frost. At the first frost in late Fall, the lush green fronds immediately turn brown and wither. Striking "bead-covered" spore-bearing stalks, however, remain standing throughout the winter.



**SENSITIVE FERN**



**MUSKRAT**

to early-Fall, look for green herons standing alone or stalking slowly through shallow water, searching for frogs, fish, and invertebrates; depends on healthy, productive water habitats for its success; can extend neck at a great distance; often gives a loud "Quonk!" when flushed, but it will often land a short distance away and resume its methodical hunting.

### **Wood duck**

One of North America's most beautiful ducks; a frequent, but shy, inhabitant of Readington's streams, rivers, and secluded ponds; relatively small duck. It has been spotted recently on the south branch of the Rockaway River on the P. Lomar Nature



**WOOD DUCK**

### **Muskrat**

Resident of ponds, streams, and rivers throughout Readington; most often digs burrow in bank; excellent swimmer, and spends most of time in or near water; eats mostly aquatic vegetation; look for the playful babies of this prolific breeder as early as mid-March.

### **Green heron**

This beautiful, but well-camouflaged, bird can be found in streams and ponds throughout Readington; from late-Spring



**GREEN HERON**

Preserve. Nests in tree-holes, and thus depends on an abundance of standing dead trees near water; able to grasp tree limbs with sharp claws at tips of webbed feet; a striking sight to see this duck flying from branch to branch in Spring, searching for a nest site; once nesting, will often fly at 30 m.p.h. into hole; will use nest boxes.



**NORTHERN  
WATER SNAKE**

### **Northern two-lined salamander**

This attractive little amphibian is Readington's most common salamander of aquatic habitats; most active at night, however, they can be found in most streams during the day by carefully overturning stones near the water-line;

excellent swimmer and runner; eats aquatic insects; female lays cluster of eggs under a rock or log in running water, and stays with eggs until they hatch into aquatic larvae.



**NORTHERN TWO-LINED SALAMANDER**

### **Mayflies**

This little fly (many species exist in Readington) inhabits high-quality streams and rivers of Readington; favors cool, clean, well-oxygenated water; during younger stages, exists as an aquatic bottom-dweller among rocks and pebbles on stream-bottom; winged adults emerge (often in large groups) and live only one or two days above water; during brief adult stage, they must breed and lay eggs, thus, any adult mayfly you see is on a very tight schedule.



**MAYFLY**



**DAMSEL FLY**



**PICKERAL FROG**  
*(left)*



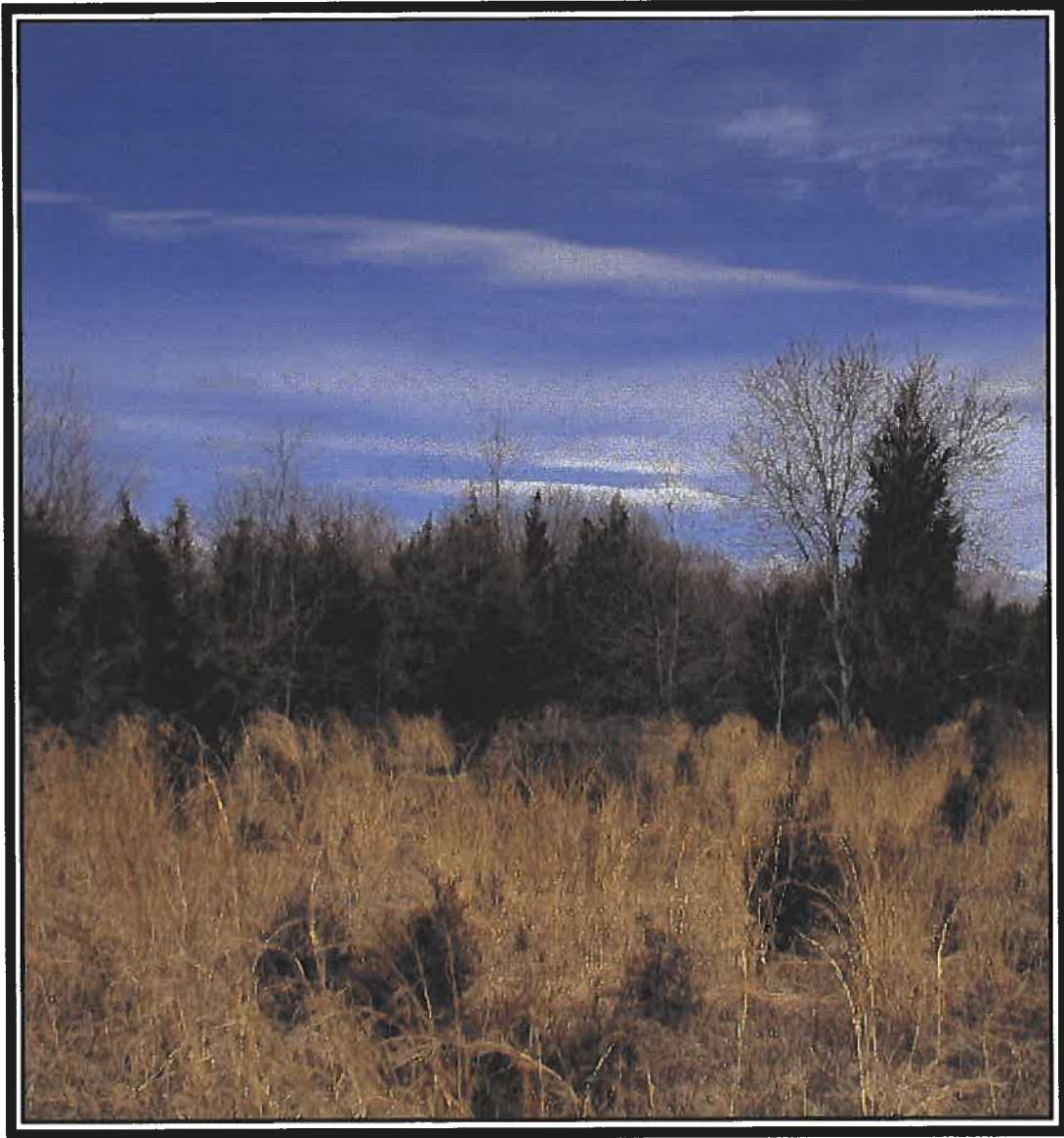
**SNAPPING TURTLE**



**KINGFISHER**

# Successional Fields & Woodland

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**CHARACTERISTIC FLORA AND FAUNA  
OF SUCCESSIONAL HABITATS  
IN READINGTON TWP.**

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**TREES**

eastern redcedar, black cherry, red maple, flowering dogwood, American elm, aspen (quaking, big-toothed), gray birch, ash, pin oak

**SHRUBS AND BRAMBLES**

bayberry, dewberry, allegheny blackberry, black raspberry, gray dogwood, sumac (staghorn, smooth, winged), multiflora rose (non-native)

**HERBS**

little bluestem, common milkweed, goldenrod spp., orchard grass, foxglove beardtongue, foxtail, queen-Anne's-lace common mullein, hawkweed, common cinquefoil, butter-and-eggs, ox-eye daisy

**MAMMALS**

meadow vole, cottontail rabbit, white-tailed deer, striped skunk

**BIRDS**

red-tailed hawk, cooper's hawk, field sparrow, chipping sparrow, song sparrow, yellow warbler, prairie warbler, northern cardinal, American robin, mourning dove, mockingbird, brown thrasher, white-eyed vireo

**HERPETILES**

box turtle, garter snake, red-backed salamander

**MOSSES AND LICHENS**

british soldier lichen, haircap moss, sphagnum moss

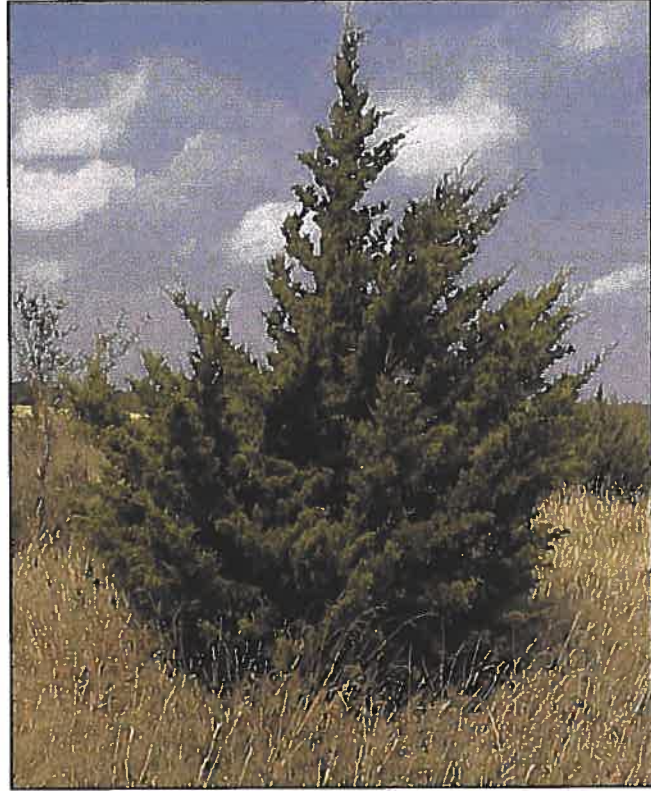
**INVERTEBRATES**

bumblebee, honey bee, hummingbird moth, ant spp., spider spp.



### **Eastern redcedar**

Readington's most common successional tree; able to withstand deer browsing due to its spiny young foliage; small, slightly sweet, bluish fruits offer important wildlife food in Fall and Winter for many bird species; fruits formerly used to flavor gin; a dieceous species, i.e., an individual tree will be either a pollen-bearing male or a fruit-bearing female; dense evergreen foliage offers important winter and nesting cover for many species of birds.



**EASTERN REDCEDAR**

### **Flowering dogwood**

One of Readington's prettiest trees; large, fragrant blossoms in Spring; large clusters of bright red berries in Fall; seeds are eaten by birds (such as American robins and other thrushes, mockingbirds, and cedar waxwings) and excreted over fields; germination of such seeds is aided by the seeds landing with a "pile of fertilizer"; a typical tree of successional habitats before



**DOGWOOD FLOWER**

the extreme overpopulation of white-tailed deer; much more susceptible to browsing as a seedling than eastern redcedar, and thus is now mostly excluded from newer successional habitats; berries are an important food for many bird species during Fall migration.

### **Goldenrod/ tiger swallowtail**

Goldenrod, a perennial herb, is a typical member of successional communities during the first 10-15 years of succession; New plants sprout



from the spreading roots of older plants, thus, a field of goldenrod may actually be composed of only a dozen or so genetically-distinct individuals; showy yellow flowers provide food for many important pollinators and other insects; the tiger swallowtail, often seen in Readington's successional habitats, depends on goldenrod and other flowering plants for nectar.



**GOLDENROD**

**TIGER SWALLOWTAIL**

**Foxglove beardtongue/  
hummingbird moth**

Beardtongue rivals goldenrod as the most abundant flowering herb in many of Readington's successional habitats; flower is a pretty, white tube structure, which makes it particularly attractive to hummingbirds and the hummingbird moth, both of which possess the necessarily-long nectar-gathering appendages.



**HUMMINGBIRD MOTH**



**FOXGLOVE BEARDTONGUE**



### **Cottontail rabbit**

Common resident of Readington's successional habitats; often use old woodchuck burrows as their den; graze day and night on a variety of herbaceous vegetation and bark; prolific breeders, and a very important food source for great-horned owls, red-tailed hawks, red foxes, and coyotes.



**COTTONTAIL RABBIT**



**COOPER'S HAWK**

### **Cooper's hawk**

Year-round resident of Readington's successional fields and woodland edges; very fast and agile flyer; nests in large stick-nests, often at top of tall conifers; hunts large songbirds such as blue jays, mourning doves, and robins via lightning-fast surprise-attack or high-speed pursuit; currently a NJ-threatened species, however making a come-back due to decreased pesticide use in the Northeast.

### **Yellow warbler**

A colorful resident of Readington's shrubby successional habitats during Spring and Summer; can be identified by its bright yellow head and chestnut stripes (male only) on breast, as well as its pleasantly cheerful song, "sweet sweet sweet I'm so sweet"; migrates to southern US and central America for Winter months.



**YELLOW WARBLER**

### **White-eyed vireo**

A Spring and Summer resident of swampy thickets and scrub vegetation found in successional habitats; the word "vireo" means "I am



WHITE-EYED VIREO

green” in Latin, and, indeed, the white-eyed vireo has an olive-greenish back; skulks around thickets, searching for insects; often heard before it is seen; song is a bold “CHICK-per-wee-o-CHICK”; related vireo species (red-eyed, solitary, yellow-throated, warbling) inhabit more forested habitats.

### Striped skunk

This fragrant, strikingly-patterned member of the weasel family is more often smelled than heard; forage at night for insects, rodents, bird eggs, and turtle eggs; like many other species, often uses old woodchuck burrows for winter and breeding dens; give birth to 6-7 young in May.



STRIPED SKUNK

### Garter snake

Likely Readington’s most common snake; a resident of scrubby, successional habitats; can often be found basking in sun or under a warm rock; eats mostly insects when young, but older snakes also hunt frogs and small rodents; gives birth to tiny live young, which is quite unusual for a reptile (eggs are the norm).



GARTER SNAKE

# Suburban

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## CHARACTERISTIC FLORA AND FAUNA OF SUBURBAN HABITATS IN READINGTON TOWNSHIP

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### TREES

assorted landscaped deciduous and coniferous trees, including maple (red, silver, Norway), oak (pin, red), flowering dogwood, various fruit trees, white pine, Norway spruce

### SHRUBS

assorted landscape varieties including viburnum spp., rhododendron spp.,

### MAMMALS

cottontail rabbit, gray squirrel, white-tailed deer, raccoon, Virginia opossum, woodchuck

### BIRDS

American robin, northern cardinal, blue jay, American crow, European starling, house sparrow, house finch, goldfinch, chipping sparrow, white-throated sparrow, downy woodpecker

### INVERTEBRATES

butterfly spp., bumblebee, honey bee

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### Native landscape plants and suburban “natural areas”

Landscape plants which are native to our area, especially those bearing fruits or nuts during the Fall season, generally provide the most satisfactory food and shelter to wildlife; similarly, areas of natural vegetation within a suburban landscape provide much-needed food and shelter for many wildlife species otherwise unable to survive on manicured lawns.

### White pine

Although not native to Readington, white pines and other conifers such as Norway spruce offer excellent food and shelter to many suburban and migratory bird species, including tufted titmice, black-capped chickadees, and woodpeckers.



WHITE PINE



### **Gray squirrel**

One of the most adaptable animals to suburban habitats; will nest in tree-holes if available, however, can also fashion a nest from leaves and twigs in tree-tops if holes are unavailable; a prolific breeder, and can be an important food source for many predators from adjacent habitats, including red-tailed hawks and great-horned owls. Plants oak trees from uneaten food stores.



**GRAY SQUIRREL**

### **White-tailed deer**

Although formerly a relatively shy animal around humans, the white-tailed deer is now thoroughly adapted to the suburban habitat, with its sprawling lawns and absence of predators (hunters); although beautiful animals, they become a danger to humans and wild plant populations (and thus other wild animals who depend on those plants) when over-abundant; currently there is over ten times the ecologically prudent population of deer in Readington; when populations are held in check by adequate hunting, however, they can become "responsible" members of suburban and surrounding habitats.



**WHITE-TAILED DEER**

### **American robin**

The song of this colorful visitor to suburban habitats, "cheery-up cheery-o", is one of the many signs of Spring; A member of the thrush family, along with bluebirds and wood thrushes, robins are skilled hunters of worms and insects in a suburban setting; depends on toxic-residue-free lawns and natural areas for food source.



**AMERICAN ROBIN**

### **American crow** (*pictured next page*)

This often-seen and heard, but little-appreciated visitor to suburban habitats is one of North America's most intelligent birds; able to analyze and quickly adapt to new situations, the crow is a skilled opportunist; crows often mate for life and form strong extended-family bonds characterized by sharing and cooperation in defense and foraging.



**BUTTERFLY**

### **Butterflies**

These beautiful insects can be attracted to suburban habitats, along with hummingbirds, by planting the appropriate flowering shrubs and herbs, including butterfly bush.



**BUMBLEBEE**

### **Bumblebee**

This native American bee is an important pollinator of both wild and agricultural plants; depends on suitable natural areas and toxic-residue-free gardens for its presence in suburban habitats.



**AMERICAN CROW** (*text previous page*)

What is commonplace today  
may well become  
tomorrow's treasures

