



Illinois Department of Natural Resources

One Natural Resources Way • Springfield, Illinois 62702-1271

DEPARTMENT OF
NATURAL RESOURCES

NOV 01 2010

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Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of the Champaign County Forest Preserve District (CCFPD), the Vermilion County Conservation District (VCCD), and the Illinois Department of Natural Resources, authorization for the incidental take of the State listed Franklin's ground squirrel (*Spermophilus franklinii* - *FGS*) in Champaign and Vermilion Counties (CVC), Illinois [associated with the construction of the Kickapoo Bike Trail (KBT) - CSX RR; Smith Road in Urbana to Vermilion County Fairgrounds east of Oakwood; as described/shown in the final conservation plan received by the Department on 17 March 2010] is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of the KBT Project in CVC, Illinois.

The Kickapoo Bike Trail will be located on the existing CSX Railroad bed that runs from Smith Road in Urbana (Champaign County) to the Vermilion County Fairgrounds east of Oakwood (Vermilion County). The rail line passes through the towns of St. Joseph, Ogden, Fithian, Muncie, and Oakwood. It is located on the Urbana, St. Joseph, Homer, Oakwood, and Danville SW USGS 7.5' topographic quadrangles.

The range of the Franklin's ground squirrel extends from northwestern Indiana, northern and central Illinois, and southern Wisconsin west to northern Kansas, Nebraska, North and South Dakota in the United States and Manitoba, Saskatchewan, and Alberta in Canada. Within Illinois, the range of Franklin's ground squirrel includes the northern two-thirds of the state, north of Madison and Clark counties. Adult Franklin's ground squirrels hibernate for long periods of time and typically are only active aboveground from mid-April to August. Breeding occurs shortly after the females emerge from hibernation and they give birth to a single litter from late May to mid-June. Litters typically consist of 6 to 9 pups, but can include as many as 13. In Illinois juvenile appear aboveground by mid-July. Juveniles do not enter hibernation until September or October. These diurnal squirrels vocalize with a sharp whistle; however, they are not readily observed in the tall, dense vegetation.

Construction activity(ies) will occur primarily along the railroad bed (approximately 20 feet wide), although there also will be staging areas for the heavy machinery used to prepare the trail. The upper 1-2 feet of soil will be removed from elevated sections of the existing railroad line so that the trail will be of the appropriate width to meet standards. Fill will be added to other sections to elevate the trail above the surrounding right-of-way. In addition, the rail bed will be cored out to a depth of approximately 1 foot to make space for crushed rock.

Franklin's ground squirrels and their burrows may be affected by these activities. A small loss of suitable habitat also will occur. It is anticipated that construction activity may temporarily disturb Franklin's ground squirrels and that individual ground squirrels may potentially be harmed due to the use of heavy equipment and the removal of soil. Active individuals may be injured or killed directly by heavy machinery, if they are unable to escape from its path.

Animals in burrows may be injured or killed if burrows are destroyed during the removal of soil from embankments. Very young ground squirrels or hibernating animals would be at greatest risk because they would not be able to move away from the approaching machinery. Removal of the top 1-2 feet of embankments and subsequent placement of crushed rock for the trail surface will result in a small loss of suitable habitat for Franklin's ground squirrel.

Procedural History

The Illinois Department of Natural Resources in conjunction with the CCFPD and the VCCD prepared a conservation plan for the KBT Project in CVC, Illinois as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDNR's request for authorization for incidental take of the State listed Franklin's ground squirrel (*Spermophilus franklinii* - FGS) in CVC, Illinois were received by the Illinois Department of Natural Resources (Department) on 17 March 2010. Public notice of IDNR's request for authorization of incidental take of these State listed species was published in the Arlington Heights/Northwest Daily Herald (Official State newspaper), The Champaign News Gazette, and the Danville Commerce News on April 22, April 29, and May 6, 2010. Public comments on this conservation plan were accepted by the Department until June 6, 2010. No public comments were received by the public during the period of April 22, 2010 through June 6, 2010.

Target Species

Franklin's Ground Squirrel/FGS (*Spermophilus franklinii*) - (Illinois) State Threatened

In Illinois, FGS prefer habitats with intermediate and tall grasses; they are not found in areas with short or mowed grasses. Cultivated land is rarely used by the diurnal squirrels, which are most often found in dense vegetation where there is limited mowing or grazing. The FGS often create burrows in elevated landscape features such as the elevated beds of railroad and road rights-of-way. Their burrows are fairly deep and well drained to be insulated from heat and cold and may have multiple entrance holes. One of the true hibernators, FGS sleep from about September to April with a body temperature just a few degrees over freezing. Right after coming out of hibernation, they breed and have a single yearly litter of 6-9 pups around early June.

FGS eat insects, green plants, seeds, fruit, amphibians, bird eggs, young birds and mammals, and carrion. Their principal predators are the red-tailed hawk, red fox, badger, coyote, striped skunk, mink, and long-tailed weasel. Their home range is usually 1.5-3 acres. At adolescence, male juveniles disperse for an unknown distance. In the wild, life expectancy is 4-5 years for females and 1-2 years for males. Even during spring and summer, the squirrels spend a majority of time in the burrow. As such, an important conservation practice will be to avoid the burrows, which have been identified during the field surveys.

Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below.

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The activities that could possibly result in taking of the Franklin's Ground Squirrel (FGS) are the construction of the proposed KBT trail project, with the following associated actions: excavation for foundation/trail work, site grading and contouring, trench/trail excavation for any necessary utility services, and general heavy equipment use.

As stated above, construction activity(ies) will occur primarily along the railroad bed (approximately 20 feet wide), although there also will be staging areas for the heavy machinery used to prepare the trail. The upper 1-2 feet of soil will be removed from elevated sections of the existing railroad line so that the trail will be of the appropriate width to meet standards. Fill will be added to other sections to elevate the trail above the surrounding right-of-way. In addition, the rail bed will be cored out to a depth of approximately 1 foot to make space for crushed rock. Franklin's ground squirrels and their burrows may be affected by these activities. A small loss of suitable habitat also will occur.

It is anticipated that construction activity may temporarily disturb Franklin's ground squirrels and that individual ground squirrels may potentially be harmed due to the use of heavy equipment and the removal of soil. Active individuals may be injured or killed directly by heavy machinery, if they are unable to escape from its path. Animals in burrows may be injured or killed if burrows are destroyed during the removal of soil from embankments. Very young ground squirrels or hibernating animals would be at greatest risk because they would not be able to move away from the approaching machinery. Removal of the top 1-2 feet of embankments and subsequent placement of crushed rock for the trail surface will result in a small loss of suitable habitat for Franklin's ground squirrel.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking.

The majority of the permanent impact will be limited to the railroad bed itself, which covers about 20 feet of the 100-foot wide right-of-way. Temporary impacts during construction will be restricted to the erosion control limits in those segments of the right of way most suitable for the occurrence of the Franklin's ground squirrel. This will be achieved by placing temporary erosion control fencing during construction which will limit the area of impact to the designated width. The remaining area within the right-of-way will continue to be suitable for foraging or dispersal. Only portions of the rail bed currently provide suitable burrowing habitat for Franklin's ground squirrel. Staging areas for heavy machinery shall not be situated in suitable Franklin's ground squirrel habitat.

The majority of the permanent impact will be limited to the railroad bed itself, which covers about 20 feet of the 100-foot wide right-of-way. Temporary impacts during construction will be restricted to a 30 – 35' area in those segments of the right of way most suitable for the occurrence of the Franklin ground squirrel. The remaining area within the right-of-way will continue to be suitable for foraging or dispersal. Only portions of the rail bed currently provide suitable burrowing habitat for Franklin's ground squirrel. Staging areas for heavy machinery will not be situated in suitable Franklin's ground squirrel habitat.

In addition, the majority of the project area is bordered by cropland. With the construction of the bike trail, existing habitat for Franklin's ground squirrel would be largely preserved. Construction activity also may enhance the suitability of other portions of the rail bed for the species. If the trail is not built, the land may eventually be converted into cropland that would not be suitable habitat for Franklin's ground squirrel.

Construction activity will be scheduled to avoid periods when young FGS are vulnerable in burrows or when most animals are in hibernation.

The trail will be narrowed in sections that provide the most suitable burrowing habitat so that less soil is removed from the embankments. This would limit potential destruction of nest chambers within burrows and maintain suitable elevation for burrowing. Removal of trees from elevated portions of the rail bed may increase their suitability as burrowing habitat for Franklin's ground squirrels. Slopes of embankments will be seeded with herbaceous vegetation. Following construction of the trail, slopes of embankments will be managed to limit encroachment of woody vegetation, in zones most suitable for the Franklin's ground squirrel.

Alternatively, if the bike trail is not constructed, it is likely that the habitat for Franklin's ground squirrel would disappear due to the encroachment of trees or conversion of the area to agricultural fields.

Investigation of adjacent lands for the purpose of the trail was undertaken, and immediately discounted. Unwillingness of private landowners to sell a strip of ground for trail purposes adjacent the unused railroad right of way preempted any attempt to continue on this course of action.

*See Also: Authorization Section of this document for more details.

Habitat Requirements/Species Status: **Franklin's ground squirrel/FGS**

Habitat Requirements

In Illinois, FGS prefer habitats with intermediate and tall grasses; they are not found in areas with short or mowed grasses. Cultivated land is rarely used by the diurnal squirrels, which are most often found in dense vegetation where there is limited mowing or grazing. The FGS often create burrows in elevated landscape features such as the elevated beds of railroad and road rights-of-way. Their burrows are fairly deep and well drained to be insulated from heat and cold and may have multiple entrance holes.

One of the true hibernators, FGS sleep from about September to April with a body temperature just a few degrees over freezing. Right after coming out of hibernation, they breed and have a single yearly litter of 6-9 pups around early June.

FGS eat insects, green plants, seeds, fruit, amphibians, bird eggs, young birds and mammals, and carrion. Their principal predators are the red-tailed hawk, red fox, badger, coyote, striped skunk, mink, and long-tailed weasel. Their home range is usually 1.5-3 acres. At adolescence, male juveniles disperse for an unknown distance. In the wild, life expectancy is 4-5 years for females and 1-2 years for males.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

- Funding in support of mitigation activities will be folded into all grant requests for trail construction. Federal and State grants typically require a match to complete funding for construction, and all jurisdictions support the mitigation requirements to satisfy preserving and protecting the Franklin's ground squirrel. Also, on a broader term, the remedies listed in the Conservation Plan (and this Incidental Take Authorization), e.g., restricted construction area(s), fencing, etc., are standard practices when working with environmental issues. Incorporating them into the construction plans will not cause any inordinate cost measure. Overall, funding in support of mitigation activities shall be folded into all grant requests for trail construction.
- Federal and State grants typically require a match to complete funding for construction, and all jurisdictions support the herein described mitigation requirements to satisfy preserving and protecting the Franklin's ground squirrel.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

The range of the Franklin's ground squirrel extends from northwestern Indiana, northern and central Illinois and southern Wisconsin west to northern Kansas, Nebraska, North and South Dakota in the United States and Manitoba, Saskatchewan, and Alberta in Canada. Hofmann (2008) documented Franklin's ground squirrels in 33 Illinois counties.

Hofmann (2008) documented Franklin's ground squirrels in 33 Illinois counties. According to the Natural Heritage Database (Illinois Department of Natural Resources), there are 4 records of Franklin's ground squirrels in Champaign County and 1 record in Vermilion County. One of the records in Champaign includes a population of Franklin's ground squirrels at Barnhart Prairie Preserve (2 miles south of Urbana) that has been present since at least 2001.

There are 33 Franklin's ground squirrel specimens in the University of Illinois mammal collection that are from Champaign County and 1 specimen from Vermilion County. Of these specimens 3 are from Mayview Cemetery (now called Mt. Olive Cemetery) and another 5 are within 2 miles of Mayview Cemetery; specimens were collected between 1947 and 1951. Mayview Cemetery is located across US 150 from the corridor.

In 1998 a single Franklin's ground squirrel was captured east of Mayview (Hofmann 1998). There has been no subsequent documentation of the species along the CSX rail line in the project area.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], will be performed:

Additional measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and official IDNR signature(s) on this authorization which indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

The Illinois Department of Natural Resources in conjunction with the CCFPD and the VCCD prepared a conservation plan for the KBT Project in CVC, Illinois as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDNR's request for authorization for incidental take of the State listed Franklin's ground squirrel (*Spermophilus franklinii* - FGS) in CVC, Illinois were received by the Illinois Department of Natural Resources (Department) on 17 March 2010. Public notice of IDNR's request for authorization of incidental take of these State listed species was published in the Arlington Heights/Northwest Daily Herald (Official State newspaper), The Champaign News Gazette, and the Danville Commerce News on April 22, April 29, and May 6, 2010. Public comments on this conservation plan were accepted by the Department until June 6, 2010. No public comments were received by the public during the period of April 22, 2010 through June 6, 2010.

PROBABLE EFFECTS OF THE PROPOSED ACTION:

If present, it is likely that some FGS within the project area will experience temporary disturbance from noise and other related activities during construction. The construction activities could possibly result in death or injury to individuals that are within the construction corridor/area. This could include individuals in underground burrows in the line of the trenching activities or individuals that could be run over by heavy equipment. The intent of the Conservation Plan and subsequent ITA is to avoid all impacts to the extent practicable, and greatly minimize those impacts that cannot be avoided.

Authorization

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of the Champaign County Forest Preserve District (CCFPD), the Vermilion County Conservation District (VCCD), and the Illinois Department of Natural Resources, authorization for the incidental take of the State listed Franklin's ground squirrel (*Spermophilus franklinii* - FGS) in Champaign and Vermilion Counties (CVC), Illinois [associated with the construction of the Kickapoo Bike Trail (KBT) - CSX RR; Smith Road in Urbana to Vermilion County Fairgrounds east of Oakwood; as described/shown in the final conservation plan received by the Department on 17 March 2010] is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of the KBT Project in CVC, Illinois.

The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of the KBT Project in CVC, Illinois. Further, it is our opinion that the take (disturbance/harassment/lethal take) authorized herein would not diminish the likelihood of the survival of either these aforementioned species (FGS) in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain in effect for a period of **5 (five) years** after the first day of official public use/public access of the KBT trail by the general public, unless terminated pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.80].

2. If new information is discovered prior to or during construction that may impact the effectiveness of the approved Conservation Plan and this Incidental Take Authorization, the IDNR, CCFPD, and VCCD (including any and all Environmental Subcontractors, Subconsultants and/or Construction Managers) shall have ten (10) business days to alter the plan appropriately. The IDNR, CCFPD, and VCCD and/or its subcontractors, shall then report to the IDNR with a description of the changed circumstances or new information and propose modifications to the plan - within 3 days (72 hours) of plan alteration.

3. If the route is moved for any reason, but still occurs in suitable habitat, surveys will be conducted as necessary (prior to any construction activities) and appropriate conservation measures will be implemented. Before any actions are implemented, results of all such surveys shall be reported to the Illinois Department of Natural Resources (IDNR), attention: Joseph Kath at 217-785-8764 (e-mail: Joe.Kath@illinois.gov) within 24 hours of a successful FGS capture. After these surveys are discussed, appropriate conservation measures can then be discussed between the applicant and the IDNR.

4. Where appropriate, and not in interference with the primary function of the KBT trail, all areas now in natural vegetation, shall be reseeded with a native vegetation mix. Restoration in non-cultivated areas shall be completed using native species or based on Department recommendations where appropriate.

5. In relation to Condition #4 above, where appropriate and not in interference with the primary function of the KBT trail, erosion control methods will be implemented and monitored until successful establishment of newly planted vegetation. Formal erosion control inspections at the entire construction site (impact zone) shall be conducted at least once (1x) a month by an agent of the IDNR, CCFPD, and/or the VCCD. Any and all recommendations to repair/replace erosion control devices shall be completed by the IDNR, CCFPD, and/or VCCD and/or a recognized agent/subcontractor/consultant within 48 hours of inspection.

In addition:

- All personnel working in the vicinity of FGS habitat shall receive training regarding general information about FGS, mitigation measures, and regulations protecting the FGS.
- The construction zone shall be minimized to disturb the smallest practicable area.
- Barrier fencing shall be installed around the construction site/impact zone(s) to exclude FGS at least one (1) week prior to construction activity. IF any FGS are found within the barrier fence (alive or dead) prior to any construction/ground disturbance activities, the CCFPD, VCCD, and/or IDNR, and/or its subcontractors shall immediately halt work and contact the Illinois Department of Natural Resources (IDNR), attention: Joseph Kath at 217/785-8764 or 217/299-9386 (e-mail: Joe.Kath@illinois.gov) within 24 hours of discovery.
- Such animals will likely need to be safely live trapped and relocated to suitable habitat - such actions shall be coordinated directly with Joseph Kath of the IDNR as stated above.
- Barrier fencing shall remain solid and in place until final cleanup and restoration is complete so that no further machinery will impact the area, and no animals, especially the FGS, enter the disturbance zone.

6. The CCFPD and the VCCD, in conjunction with the appropriate Office(s) of the IDNR, either in cooperation with or through its consultants/subcontractors, shall be responsible for ensuring that all tasks described above in this Incidental Take Authorization package are completed prior to and during construction of the entire project. Any FGS (alive or dead) found at any time within the fenced or non-fenced project area shall be reported to the Illinois Department of Natural Resources (IDNR), attention: Joseph Kath at: 217/785-8764 or 217/299-9386 (e-mail: Joe.Kath@illinois.gov) within 24 hours of discovery.

7. The effective period of this authorization may be altered by mutual agreement between the appropriate offices of the Illinois Department of Natural Resources and appropriate offices of the CCFPD and the VCCD.

8. Per this Incidental Take Authorization, the following conditions/measures shall apply:

Appropriate offices of Illinois Department of Natural Resources, CCFPD, and VCCD shall direct their personnel, consultants and/or contractors to:

- A. Ensure that all tasks are completed as described in the Conservation Plan and this Incidental Take Authorization Package.
- B. Ensure that all maps are accurate and up to date showing areas of Franklin ground squirrel (FGS) habitat that is most suitable.
- C. Coordinate training for all construction personnel from a qualified biologist with knowledge of the Franklin's ground squirrel and linear construction projects.
- D. Install barrier fencing to restrict the area of construction in those areas most suitable for FGS.

- E. Conduct daily inspections during construction of barrier fencing.
- F. Conduct daily inspections of the impact area(s) for Franklin's ground squirrels (FGS).
- G. Any FGS (alive or dead) found at any time within the fenced or non-fenced project area shall be reported to the Illinois Department of Natural Resources (IDNR), attention: Joseph Kath at: 217/785-8764 or 217/299-9386 (e-mail: Joe.Kath@illinois.gov) within 24 hours of discovery.
- H. Such animals will likely need to be safely live trapped and relocated to suitable habitat - such actions shall be coordinated directly with Joseph Kath of the IDNR as stated in this document.

9. Per this Incidental Take Authorization, the following conditions/measures shall apply - The IDNR, CCFPD, and VCCD coordinated responsibilities include:

- A. The Conservation Plan shall be undertaken jointly by the Champaign County Forest Preserve District, the Vermilion County Conservation District and the Illinois Department of Natural Resources.
- B. The Champaign County Forest Preserve District shall be responsible for the trail segment in Champaign County starting at Station 00 + 00 and continue east to the county line at Station 714 + 00. The Champaign County Forest Preserve shall also coordinate with the following local jurisdictions in this segment; City of Urbana; City of St. Joseph; Village of Ogden.
- C. The Vermilion County Conservation District shall be responsible for the trail segment in Vermilion County starting at Station 714 + 00 and continuing east to the Kickapoo State Park boundary. The Vermilion County Conservation District shall also coordinate with the following local jurisdictions in this segment; Village of Fithian; Village of Muncie; City of Oakwood.
- D. The Illinois Department of Natural Resources shall be responsible for the trail segment in Vermilion County bounded on each side by the existing state park boundary. The Department shall also coordinate with Vermilion County adjacent the area now occupied by the county fairgrounds.
- E. Ensure procedures in the Conservation Plan are implemented in maintenance of trail upgrades are performed on the trail right of way.
- F. Continue to monitor and survey the trail right of way on a periodic basis to ensure mitigation measures have succeeded in protecting FGS habitat.

10. In relation to Condition #9 above: Upon completion of the trail (i.e. after the first day of official public use/public access of the KBT trail by the general public) qualified employees of either the IDNR, CCFPD, and/or VCCD [or a qualified ecological consultant hired through either the IDNR, CCFPD, and/or VCCD] shall conduct both a visual survey of the entire route for the potential presence of FGS (active burrows, specimens) as well as strategic live trapping at suitable habitat locations along the entire route during the Spring/early Summer of Year 5. For example, if the trail is completed in 2012, this survey shall occur in 2017. All results of this survey effort shall be reported directly to the Illinois Department of Natural Resources (IDNR), attention: Joseph Kath (e-mail: Joe.Kath@illinois.gov).

11. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that either the CCFPD, VCCD, and/or Offices of the IDNR have failed to comply with any of these terms and conditions and/or has been responsible for the take of any State Listed Species beyond that which is incidental to the construction of the KBT in CVC, Illinois.

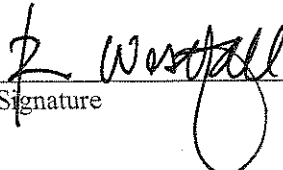
12. The IDNR, CCFPD, and VCCD official(s) identified below is/are authorized to execute this agreement. Execution by an official from any one of these organizations indicates acceptance of all terms and conditions described in this document.

For the IL. Department of Natural Resources:

Dr. James Herkert, Director
IDNR - Office of Resource Conservation

Date Signed

A. For the Office of the Illinois Department of Natural Resources directly involved in construction of the KBT:



Signature

Richard Westfall

Please print name and official title
Mgr., Greenways & Trails Sec.

11/15/10

Date Signed

B. For the Office of the CCFPD directly involved in construction of the KBT:

Jerry Pagac / jpb
Signature

Jerry Pagac Executive Director
Please print name and official title

10-27-10
Date

C. For the Office of the VCCD directly involved in construction of the KBT:

Kenneth F. Konsis
Signature

Kenneth F. Konsis, EXECUTIVE DIRECTOR
Please print name and official title

10-26-10
Date

