Andrew Kass

From:

Alan R. Singleton [singleton@singletonlawfirm.com]

Sent: To: Thursday, April 18, 2013 12:00 PM

10:

John Hall; Andrew Kass

Subject: Attachments:

Jones Case 688-S-11 & 687-AM-11

01. Appraisal Consulting Report from James Webster, MAI, SRA.pdf; 02. Signed letter of agreement from Bragg.pdf; 03. Letter from IDNR and EcoCAT review of Jones Property.pdf; 04. Picture taken from street of Hall front yard with vehicles.pdf; 05. UIUC No-Mow Sign showing customary practice pdf; 06. Aprial GIS map of Hall property above a related

showing customary practice.pdf; 06. Aerial GIS map of Hall property showing trees planted along north border.pdf; 07. Property Management Plan submitted by Stikkers.pdf; 08. Graph

showing noise comparison.pdf; 09. Graph showing traffic comparison.pdf

John, Andy:

Attached please find a copy of the 9 documents to be included, along with a copy of this email, in the board packet going out to board members and other persons.

- 1. Appraisal Consulting Report from James Webster, MAI, SRA. He opines on page 14 that allowing the RLA would not have any negative impact on property values in the neighborhood.
- 2. Signed letter of agreement from Bragg, affirming that the Jones have permission for the RLA to use Bragg Farms property for the side transition.
- 3. Letter from IDNR and EcoCAT review of the Jones Property, concluding that adverse effects are unlikely.
- 4. Picture taken from Route 130 of Hall front yard, showing recreational vehicle parked in the yard
- 5. Picture of sign located in UIUC Research Park, showing accepted practice of not mowing in order to encourage native plant growth, increase habitat for wildlife, and promote sustainable landscapes
- 6. Aerial GIS map of Hall property, showing line of trees planted along the northern boundary of the property as an example of customary practice in rural areas to allow planted trees to function as a fence or border.
- 7. Property Management Plan created by Bruce Stikkers, as requested by County staff/ZBA board
- 8. Bar graph depicting comparison of sound pressure levels (SPL) in decibels, including Cessna aircraft and BELL helicopter. Included for comparison are the gunshots, farm machinery, and dogs barking, semis, all of which are louder than the helicopter and plane. Prior testimony has established that these other mentioned uses which are louder are present in the neighborhood.
- 9. Bar graph depicting comparison of traffic levels along Hall property. Please note that the traffic counts for the vehicle passes on Route 130 (1,222,750 per year according to IDOT) were so much higher than the 121 passes per year by aircraft that our graphing software would not register the number of aircraft passes.

Best regards.

Alan

Alan R. Singleton Singleton Law Firm, P.C.

Research Park at the University of Illinois 2001 South First Street, Suite 209 Champaign, Illinois 61820 217-352-3900 Phone 217-352-4900 Fax singleton@singletonlawfirm.com www.singletonlawfirm.com

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IRS CIRCULAR 230 NOTICE. Any advice expressed above as to tax matters was neither written nor intended by the sender or Singleton Law Firm, P.C. to be used and cannot be used by any taxpayer for the purpose of avoiding tax penalties that may be imposed under U.S. tax law.

APPRAISAL CONSULTING REPORT

APPRAISERS:

James H. Webster, MAI, SRA

James H. Webster & Associates, Ltd.

104 West University Avenue

Urbana, Illinois 61801

CLIENT:

Mr. Alan R. Singleton

Singleton Law Firm, PC 2001 S. First Street

Champaign, Illinois 61820

SUBJECT PROPERTY:

Proposed Restricted Landing Area

175 N CR 1600 East

Villa Grove, Illinois 61956

EFFECTIVE DATE OF ASSIGNMENT:

April 12, 2013

DATE OF REPORT:

April 17, 2013





INTENDED USE OF REPORT:

The Intended Use of the opinions and conclusions derived from this consulting assignment is to evaluate the property that is the subject of a public hearing to assist the client, Mr. Alan Singleton, in determining if there would be an adverse impact of adjoining properties as a result of the use of a restricted landing area, hereafter known as a RLA, subject to the stated Scope of Work, problem to be solved, reporting requirements of this appraisal report type, and Definition of Value. As shown by the attached map, the proposed restricted land area is planned to be used near a residence which has a mailing address of 175 N CR 1600 East, Villa Grove, Illinois. The report is being conducted for a Champaign County Zoning Board hearing known as Case 688-S-11, regarding this matter. Phillip Jones and the Champaign County Zoning Board are additional Intended Users identified by the consultant, and the opinions and conclusions cannot be used for any other purpose without prior written authorization from James H. Webster & Associates, Ltd.

INTENDED USER OF REPORT:

The consulting assignment was ordered by Mr. Alan R. Singleton, which is the Client for this assignment. The consultant-client relationship is subject to the Confidentiality section of the Ethics Rule of the *Uniform Standards of Professional Appraisal Practice* (USPAP), which states that a consultant must not disclose confidential information, or assignment results prepared for a Client to anyone other than the Client, or persons specifically authorized by the Client. The Client has identified its client, Phillip Jones and the Champaign County Zoning Board as additional intended users.



TYPE AND DEFINITION OF VALUE TO BE DETERMINED:

The Client has requested an opinion regarding the effect, if any, on nearby properties. A proposed RLA has been attached.

Market Value is defined as the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeable, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- (1) buyer and seller are typically motivated;
- (2) both parties are well informed or well advised, and acting in what they consider their own best interests;
- (3) a reasonable time is allowed for exposure in the open market;
- (4) payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- (5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale. (Source: 12 C.F.R. Part 34.42(g); 55 Federal Register 34696, August 24, 1990, as amended at 57 Federal Register 12202, April 9, 1992; 59 Federal Register 29499, June 7, 1994]

Real Property is defined as:

All interests, benefits, and rights inherent in the ownership of physical real estate; the bundle of rights with which the ownership of the real estate is endowed. ¹

IDENTIFICATION OF THE SUBJECT PROPERTY:

The proposed RLA landing area would be situated on an a 12.69 acre tract of land which is part of the Jones residence which has a mailing address of 175 N CR 1600 East, Villa Grove, Illinois. The restricted landing area would provide the owner, Phillip Jones, to use this area for a helicopter for no more than twenty-five take-offs and twenty-five landings per year along with invited guests. There are several restrictions and limitations being placed upon traffic patterns, altitude and storage. Fixed-wing aircraft which will be limited to thirty-eight take-offs and thirty-eight landings per year. The subject property is located on the west side of CR 1600 E or State Highway 130, south of CR 200 N, and the RLA contains approximately 14-acres. Phillip Jones owns an additional larger acreage parcel to the north which includes his residence. There are three residences located east of a larger parcel on the west side of CR 1600 E which have addresses of 177,187 and 199 CR 1600 E, Villa Grove, Illinois.

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APR 18 2013

¹ The Dictionary of Real Estate Appraisal, 4th Edition, by the Appraisal Institute, 2002.

OWNERSHIP HISTORY:

The subject property is currently in the name of Phillip Jones. There has been no transfer of ownership in the three years prior to the effective date of this consulting assignment, nor is the property for sale at this time.

LEGAL DESCRIPTION:

A complete legal description was not provided but it has been described as:

Part of the Section 27, Township 17 North, Range 9 East 3rd PM, Champaign County, Illinois

TAX AND ASSESSMENT INFORMATION:

The tax and assessment information for the subject property has been shown below:

Permanent Parcel Number	Farmland	<u>Land</u>	Building	<u>Total</u>	<u>Tax</u>
08-33-27-200-024	\$2,520	\$0	\$0	\$2,520	\$159.98

The assessments shown above are classified as farmland, which is based on its productivity, rather than market value.



EXTRAORDINARY ASSUMPTIONS:

An Extraordinary Assumption is defined as:

An assumption, directly related to a specific assignment, which if found to be false, could alter the appraiser's opinions or conclusions. Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal or economic characteristics of the subject property; or about conditions external to the property such as market conditions or trends; or about the integrity of the data used in an analysis.²

Two extraordinary assumptions were used in the analysis, which has been discussed below:

- 1. Information was supplied by the client regarding the specifications of the proposed RLA, which has been assumed to be accurate.
- 2. Information regarding the location of the RLA has been assumed to be accurate.

HYPOTHETICAL CONDITIONS:

A Hypothetical Condition is defined as:

That which is contrary to what exists but is supposed for the purpose of analysis. Hypothetical conditions assume conditions contrary to known facts about physical, legal or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in the analysis.³

There were no hypothetical conditions used in the analysis.

² <u>Ibid</u>

Ibid.

SCOPE OF WORK:

The development and reporting of a real property consulting report must be done in compliance with Standards 4 and 5 of the *Uniform Standards of Professional Appraisal Practice* (USPAP) as promulgated by the Appraisal Standards Board of the Appraisal Foundation. Standard 4 contains requirements that deal with the procedures to be followed in developing the consulting assignment in a manner that will result in a credible result. *Credible* is defined in the 2012 Edition of *USPAP* as "worthy of belief." The scope of work necessary to produce a credible consulting report is determined by the consultant based on the problem to be solved and the intended use. This assignment has been developed in conformity with the requirements of Standard 4 of the 2012 Edition of USPAP.

Standard 5 requires that the consultant's conclusions must be communicated in a manner that is not misleading. It provides three reporting options with varying levels of content and information. The appropriate reporting option is dependent upon the intended user and intended use of the consulting assignment. The intended user of this report is an attorney, along with an individual and members of a zoning board who are familiar with the procedures used to develop an opinion of the impact on value, if any, on surrounding residential real estate for a property of this type. Therefore, the results of the analysis have been compiled into a report that is intended to comply with Standard 5-2 of the *Uniform Standards of Professional Appraisal Practice*. Additional support is retained in your appraiser's files.

Demographic and economic data have been collected from *The News Gazette*, the Illinois Department of Commerce and Economic Opportunity, the Illinois Department of Employment Security, the U. S. Census Bureau, and the Illinois Business Review. Furthermore, reference has been made with the Champaign County Assessor's, Treasurer and Zoning offices. Data applicable to the consulting assignment has been gathered, confirmed, and analyzed to determine trends in the marketplace that would have an effect on the marketability of surrounding residential real estate and its effect, if any, on Market Value.

James H. Webster, MAI, SRA made an exterior examination of the subject site on April 12, 2013. He observed the site from the road along with a driveway to the residence at 175 CR 1600 E, Villa Grove, Illinois. He observed the proposed RLA from the driveway along with its proximity to the nearby residences along CR 1600 E. He also spoke with Alan Singleton regarding the proposed RLA and read about the specifications of the proposed use. Photographs of the site of the proposed RLA and surrounding residential real estate were also taken on that date.

The scope of consulting assignment included compiling the most relevant and widely accepted literature written relative to the impact of private airports on adjoining real estate and applying the results of these studies to the proposed RLA in order to form an opinion regarding the impact, if any, on surrounding real estate.



COMPETENCY STATEMENT:

James H. Webster, MAI, SRA, has more than forty years of appraisal and consulting experience, with more than thirty of those years involved in the appraisal of single family, multi-family, agricultural, commercial, and industrial properties in Central Illinois. His experience also includes a number of appraisals of residential properties in the Champaign County, Illinois area. He has also conducted appraisals of tracts of land adjacent to the expansions of airports at Taylorville and Charleston. He has appraised several hangar facilities including facilities at the Paxton and Douglas County Airports. He has also appraised properties which are adjacent to a number of airport facilities. Mr. Webster has also been employed as a consultant to several proposed projects and determining their effect on real estate for a private airport, wind turbine facilities along with a landfill prior to this assignment in the Central Illinois market area along with other consulting assignments involving the potential effects of proposed projects on nearby residential uses. Mr. Webster is in compliance with the Competency Provision of the *Uniform Standards of Professional Appraisal Practice* (USPAP) with respect to this assignment.



CERTIFICATION

I certify that, to the best of my knowledge and belief:

- 1. the statements of fact contained in this report are true and correct.
- 2. the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and is my personal, impartial and unbiased professional analyses, opinions and conclusions.
- 3. I have no present or prospective interest in the property that is the subject of this report, and no personal interest with respect to the parties involved.
- 4. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- 5. my engagement in this assignment was not contingent upon developing or reporting predetermined results.
- 6. my compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the clause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this consulting assignment.
- 7. my analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice (USPAP) and with our interpretation of the guidelines and recommendations set forth in the Title XI Regulations of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA).
- 8. the assignment was not based on a requested minimum valuation, a specific valuation or results.
- 9. I have made a personal inspection of the property that is the subject of this report.
- 10. no one provided significant professional assistance to the persons signing this report.
- 11. this assignment has been developed and the report has been prepared in conformity with, and is subject to the requirements of, the Code of Ethics and Standards of Professional Practice and Conduct of the Appraisal Institute.
- 12. As of the date of this report, I, James H. Webster, MAI, SRA have completed the education, experience, and examination requirements for the Illinois Certified General Real Estate Appraiser license.

APR 1 8 2013

James H. Webster & Associates, Ltd.

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13. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its authorized representative.

14. I have not appraised the subject property in the three years prior to the effective date of the consulting assignment.

RESTRICTION UPON DISCLOSURE AND USE

Disclosure of the contents of this consulting report is governed by the by-laws and regulations of the Appraisal Institute.

Neither all nor any part of the contents of this report (especially any conclusions, the identity of the consultant or the firm with which he is connected, or any reference to the Appraisal Institute) shall be disseminated to the public through advertising media, public relations media, news media, sales media, or any other public means of communication, without prior written consent and approval of the undersigned.

James Webster email-office@websterappraisals.

Output

Date: 2013.04.18 10:56:44-05:00

Digitally signed by James Webster DN: cn=James Webster, o=Webster, ou=Webster,

James H. Webster, MAI, SRA Illinois Certified General Real Estate Appraiser # 553.000270



LIMITING CONDITIONS

This assignment is subject to the following limiting conditions:

- 1. I assume no responsibility for matters in character, nor do I render any opinion as to title, which is assumed to be marketable. All existing liens and encumbrances have been disregarded, and the property is appraised as though free and clear under responsible ownership and competent management.
- 2. Unless otherwise noted herein, it is assumed that there are no encroachments, zoning violations or restrictions existing in the subject property.
- 3. Information, estimates, and opinions contained in this report are obtained from sources considered reliable; however, no liability for them can be assumed by the appraiser.
- 4. Possession of this report, or a copy thereof, does not carry with it the right of publication, nor may it be used for any purpose by anyone but the applicant, without the previous written consent of the appraiser or the applicant, and in any event, only with the proper qualifications.
- 5. I am required to give testimony or attendance in court by reason of this assignment, with reference to the property in question.
- 6. This assignment is intended solely for use by the client and for the purpose stated in the report. Use of this report by others or for any other purpose is not intended by the appraiser.
- 7. This assignment was developed in a manner consistent with the requirements of Standards Rule 4 of the 2012 Edition of the *Uniform Standards of Professional Appraisal Practice*.



Review of Literature.

The consultant has searched for literature in the Lum Library of the Appraisal Institute, but no studies can be referenced which are similar in nature to the subject property's RLA.



DESCRIPTION OF REAL ESTATE APPRAISED:

Location Description.

The subject property is situated in a rural area that is approximately three miles north of Villa Grove, Illinois. The neighborhood, similar to most rural areas, is difficult to define, but could be generally limited to the uses west of CR 1600 E, south of CR 200 N, north of Douglas County and east of CR 1500 E. The East Branch of the Embarras River is included in the neighborhood. It is characteristic of a rural location which has a wide array of housing ages, designs, and prices scattered amongst the predominant land use, which is agricultural and conservation. The primary highway is State Route 130 which is east of the subject property. There are several newer houses in the neighborhood, particularly along CR 200 N. The neighborhood is approximately 5% built up, with residences along with roadways with the remainder being agricultural and conservation/recreation. The neighborhood is stable and no changes are anticipated.

Description of Proposed Project and Relationship to Nearby Uses.

The proposed RLA would include an open field for the landing area utilizing grasses. The proposed RLA has been shown on an attachment.

It should be noted that there are also a few other factors worthy of noting relative to the location of the proposed RLA and the surrounding uses. The two residences are located on CR 1600 E or State Highway 130 which have a daily traffic count of 3,350 vehicles of which 220 are trucks. There is also farm machinery operating in the area.



Market Impact Analysis.

There are several methods which could be used to determine if the proposed RLA will have an impact, if any, on surrounding real estate values. Paired sales analysis is a widely accepted method of determining the effect of a particular characteristic on real estate. In this case, your consultant could search for similar conditions to find sales of agricultural tracts of land where the single differing factor would be the proximity to an airport or RLA and determine what, if any, effect it had on the sales price. However, there have been an insufficient number of sales that could be located which would produce credible results.

The consultant must consider this particular project to determine if there are any peculiar factors which might result in different results. Your consultant has considerable experience appraising residences which are near private landing strips such as Aero-Place east of Urbana as well along with community airports including Monticello, Paxton, and Tuscola where nearby properties have not been negatively impacted. Therefore, it is reasonable to conclude that the market would not discount any nearby properties for the proposed RLA.

The use as a RLA would involve less usage than the examples referred to above. The proposed RLA would, in this consultant's opinion, would not diminish or impair property values in the neighborhood.

The consultant has also considered his experience as a real estate appraiser in giving his opinion on this matter. Although, a search was made for studies with the Lum Library for the Appraisal Institute, none were located that are similar. Therefore, there is no literature which could be relied upon in order to support this opinion. However, your consultant is not aware of market resistance or any diminution in value relative to properties that are near a RLA.

Therefore, based upon my experience as a real estate appraiser, it is the conclusion of this consultant that the granting a special use permit to allow a RLA will not have negative impact on real estate values in the neighborhood.



QUALIFICATIONS OF THE CONSULTANT

James H. Webster, MAI, SRA

<u>Education</u>	
1973	Ohio State University, B.S. in Real Estate and Urban Economics
1973	SREA 101, Introduction to Real Estate Appraising
1973	SREA 201, Principles of Income Property Appraising
1974	AIREA 202, Urban Properties
1982	SREA 202, Case Studies
1999	Appraisal Institute 600, Income Valuation of Small, Mixed-Use Properties
2006	Appraisal Institute, USPAP, Part C
1973-2009	Attended Various Seminars Sponsored by the Appraisal Institute
Experience	
1973-1975	Commerce Investment Corporation, Staff Appraiser
1975-1983	First Federal Savings, Appraiser and Loan Officer
1983-1986	American Savings, Staff Appraiser
1986-present	James H. Webster & Associates, Ltd., President

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Certification

HUD

Illinois State Certified General Real Estate Appraiser

FNMA

#553.000270

Institutions

Expires 09/30/2013

Indiana Certified General

Real Estate Appraiser CG40600088

Expert Witness

Douglas, Piatt, Macon, Crawford and Champaign counties

Teaching

Parkland College, Champaign, Illinois

1997 Principles of Real Estate Appraisal

2000 Uniform Standards of Professional Appraisal Practice

Professional Service

1976-1979	SREA, Treasurer, Chapter #166
1979	SREA, Young Advisory Committee
1980-1981	SREA, Vice President, Chapter #166
1982-1983	SREA, President, Chapter #166
1989-1990	SREA, Vice President, Chapter #166
1991	Appraisal Institute, President, Central Illinois Chapter

Professional Designations

1981-present SRA, Senior Residential Appraiser	1981-present	SRA,	Senior.	Residentia	al Appraiser
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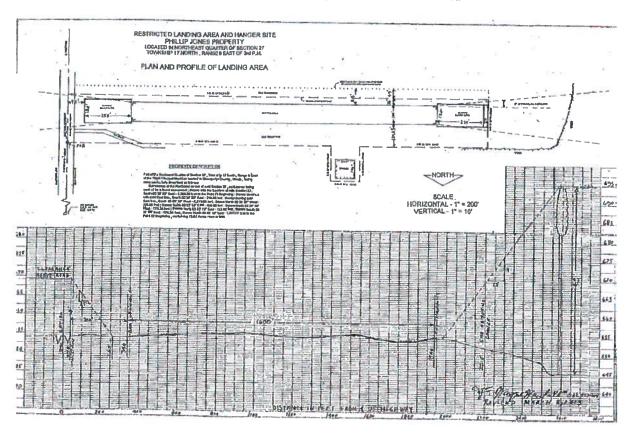
1986-present Realtor, Champaign County Association of Realtors

1990-1994 SRPA, Senior Real Property Appraiser 1994-present MAI, Member of the Appraisal Institute





PLAN AND PROFILE OF LANDING AREA



RESTRICTIONS

CASE 688-S-11 Petitioners Phillip and Sarabeth Jones

Jones' Restricted Landing Area Special Conditions

Owners agree to voluntarily comply with the following procedures in the use and operation of airplanes and helicopters ("Aircraft") on the proposed Restricted Landing Area (RLA):

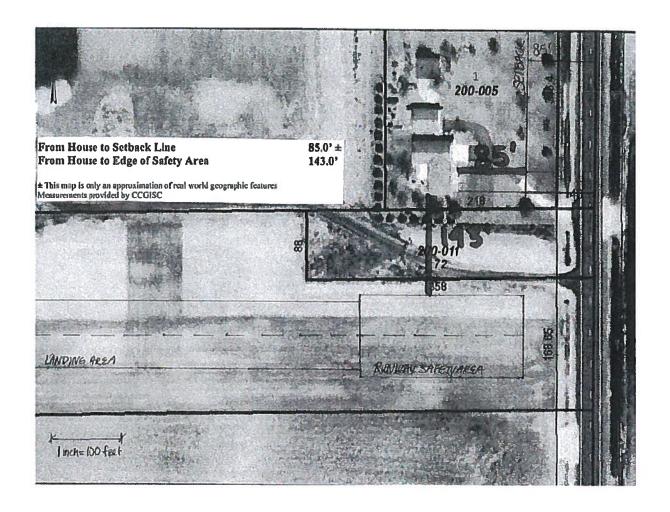
- 1. Traffic Patterns. (a) All landing traffic patterns will be flown exclusively south of the RLA, thus maximizing the distance between the Aircraft and neighboring residential properties to the north.
 - (b) There will be no tight northbound departures below 1000 feet,
- 2. Altitude Restrictions. There will be an increased traffic pattern altitude of 1500 ft AGL (above ground level) as opposed to the standard 1000ft AGL altitude.
- 3. Pre-Operation Procedures. All pre-operation run-up procedures will be conducted at the furthest practicable location away from neighboring properties, provided that any pre-operation run-up procedure that is conducted at least as far west as the location of the proposed hanger will be deemed to meet this restriction.
- 4. Aircraft Storage. Aircraft stored at the RLA will be limited to owner's Aircraft and/or those of parents, children or siblings of owner, which in no case will exceed eight aircraft at any given time.
- 5. Limitations of Helicopter Use. Except in case of assistance for public safety, owners will limit use of any helicopter to no more than twenty-five (25) take-offs and twenty-five (25) landings in any 12-month period.
- 6. Limitations of Fixed-Wing Aircraft. Except in case of assistance for public safety, owners will limit the use of any fixed-wing aircraft to no more than thirty-eight (38) take-offs and thirty-eight (38) landings in any 12-month period.
- 7. Insurance. At any time when take-offs or landings occur, a minimum of five million dollars of liability insurance coverage shall be maintained.



LOCATION MAP



AERIAL VIEW



LOOKING SOUTH ON 130



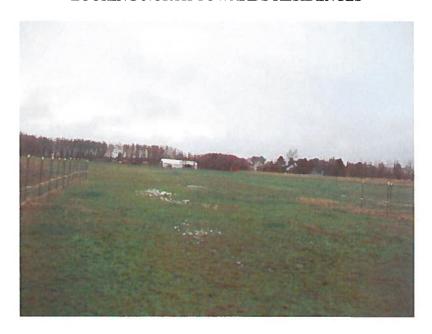
LOOKING NORTH ON 130



LOOKING WEST (DRIVE WAY)



LOOKING NORTH TOWARDS RESIDENCES



LOOKING SOUTH TOWARDS RLA



April 8, 2013

Zoning Board of Appeals c/o John Hall Brookens Administrative Center 1776 E. Washington, Urbana, IL 61802

Re:

Cases No. 687-AM-11 and No. 688-AM-11 Petitioners Philip W. and Sarabeth F. Jones

Dear Board:

I am writing this letter to affirm that the Jones have permission to use part of Bragg Farms, Inc.'s property for the south side transition of their proposed restricted landing area.

Bragg Farms, Inc. is the owner of the property to the south, immediately adjacent to the Jones' property. I understand that, according to the updated site plan submitted by Jones, the proposed restricted landing area would be moved 36 feet south on the Jones' property. I understand that the IDOT regulations require side transitions on each side of the runway, and I recognize that the approval of the updated plans would result in 49 feet of the south side transition extending over Bragg Farms, Inc.'s property. The Jones have asked me for permission, and I give the permission.

With best regards.

Sincerely,

RPAGG FARMS INC

David Bragg, President



http://dnr.state.il.us

Pat Quinn, Governor Marc Miller, Director

Crystl Chang Alan Singleton 2001 S 1st St #209 Champaign, IL 61820

April 08, 2013

RE: Zoning Request for Special Use Permit

Project Number(s): 1312073 [1312055, 1311768, 1109213]

County: Champaign

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

Provided all federal, state and local enivironmental laws, regulations and ordinances are complied with, adverse impacts to listed state resources do not appear likely.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Rick Pietruszka Division of Ecosystems and Environment 217-785-5500





04/08/2013

1109213

1312055, 1311768,

IDNR Project Number: 1312073

Date:

Alternate Number:

Applicant: Contact:

Alan Singleton Crystl Chang

Address:

2001 S 1st St #209

uress.

Champaign, IL 61820

Project:

Zoning Request for Special Use Permit

Address:

175N CR 1600E, Villa Grove

Description: Request to rezone in Champaign County from current Conservation-Recreation District to Agriculture District, to allow for Special Use Permit for use of a Restricted Landing Area, which would allow some helicopter landings. Use of the Restricted Landing Area would be for private individual use only with restrictions as to the number of take-offs and landing within a year (currently being discussed is 25 take-offs and 25 landings for helicopter, and 38 take-offs and 38 landings for airplane). Regarding the runway itself, there will be no additional actions requiring alteration or destruction of vegetation (other than perhaps marking an "H" at some location now planted in grass to designate where a helicopter landing will occur). In the area of the proposed hangar, there would be some change to

Please see e-mailed site plan for more details.

vegetation to allow for construction of the hangar.

Request electronic file.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Little Spectaclecase (Villosa lienosa)

An IDNR staff member will evaluate this information and contact you within 30 days to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Champaign

Township, Range, Section:

17N, 9E, 26 17N, 9E, 27

IL Department of Natural Resources Contact

Rick Pietruszka 217-785-5500 Division of Ecosystems & Environment



Local or State Government Jurisdiction Champaign County Department of Planning and Zoning John Hall 1776 E Washington St. Brookens Administrative Center Urbana, Illinois 61820

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Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

- 1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.
- 2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
- 3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.







GIS Webmap 177 N CR 1600 E, Villa Grove, IL



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Champaign County

Soil and Water Conservation District 2110 West Park Court Suite C Champaign, IL 61821 (217) 352-3536 Extension 3 --- fax 855-289-5179 www.ccswcd.com

Phil Jones Property
Property Management Plan
March 22, 2013

Many of the management techniques applicable for the site are described in various Natural Resources Conservation Service Standards. I have selected those most appropriate for the site and then commented on the specific portions that most fit this location.

The grassed areas are addressed in Standard #645 for Upland Wildlife Habitat Management. The entire practice standard is attached to this report for reference. The following are comments on the most critical sections and how they apply to this site. The section on page 2 labeled for Grasses, Legumes and Forbs Development lists strip disking or burning as management practices. The native prairie planting along the runway on the east portion could benefit from these management techniques. The key is to do the disking or burning on 1/3 of the area each year. This is done so adequate undisturbed habitat is available for wildlife during the management practice. Burning requires a permit from the IEPA that needs to be applied for annually. Some practices such as brush piles mentioned on page 5 could add to the habitat desirability of the site.

Standard Practice 647, Early Successional Habitat Development/Management also applies to the site. Prescribed burning and strip disking are included in this standard.

Also included is Practice Standard 338 for Prescribed Burning. There is an attempt being made to form a group of local people who would assist with burning. A trailer with burn equipment is available through Pheasants Forever. Burning would help the wooded as well as the grassed areas, especially if the bush honeysuckle could be removed.

The timber areas should be managed following the information in the Forest Stand Improvement practice #666. The key is to keep invasive species out and thin the trees so the tree canopies meet, but do not grow into each other. Trees that have competition cut away are released from competition and develop into more desirable trees. A site visit revealed a significant bush honeysuckle infestation that should be the first priority. There are companies that have forestry cutters that can come in and cut down what you have and grind it up in one operation. We have leased equipment to do this on our wetland and it is very successful. They would still need a herbicide treatment to prevent future grow back. Trees in this area can be selectively harvested as part of a management plan and the area would still be valuable wildlife habit. The National Wild Turkey Federation has a forester in the area that could prepare a specific plan for the site if desired.

A number of trees have been planted on the berms present and around the grounds. These plantings will add to the value as a conservation area.

Bruce Stikkers

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

UPLAND WILDLIFE HABITAT MANAGEMENT

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CODE 645

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DEFINITION

Provide and manage upland habitats and connectivity within the landscape for wildlife.

PURPOSE

Treating upland wildlife habitat concerns identified during the conservation planning process that enable movement, or provide shelter, cover, and food in proper amounts, locations and times to sustain wild animals that inhabit uplands during a portion of their life cycle.

CONDITIONS WHERE PRACTICE APPLIES

- Land where decision-maker has identified an objective for conserving a wild animal species, guild, suite, or ecosystem.
- Land within the range of targeted wildlife species which is capable of supporting the desired habitat.

CRITERIA

General Criteria Applicable to all Purposes

The Illinois Wildlife Habitat Evaluation or species-specific habitat model, approved by the NRCS state office, shall be used to identify habitat-limiting factors in the planning area.

Application of the practice shall remove or reduce limiting factor(s) in their order of significance, as indicated by results of the habitat evaluation.

Application of the practice alone, or in combination with other supporting and facilitating practices, shall result in a conservation system that will enable the planning area to meet or exceed the minimum quality criteria for wildlife habitat established in Section III of the FOTG.

Plant material specifications shall include only high quality and adapted species.

Native plant materials will be used whenever possible. The use of native species will reduce problems associated with non-adapted and invasive plants.

Site preparation, planting dates, and planting methods shall optimize vegetation survival and growth.

If grazing is used as a management tool, then PRESCRIBED GRAZING (528) must accompany the practice.

Equipment travel, grazing, haying and other disturbance to habitat shall be restricted during critical periods such as nesting. Exceptions may be made during the period of vegetation establishment and for management activities to maintain the health of the plant community and to control noxious and invasive weeds.

Techniques for control of regulated noxious weeds and other invasive plants shall be specified.

Biological control of undesirable plant species and pests (e.g., using predator or parasitic species) shall be implemented where available and feasible.

Any habitat management technique used will ensure soil loss is within tolerable limits (T).

Protect forbs and legumes that benefit native pollinators and other wildlife and provide insect food sources for grassland nesting birds. A diversity of forbs and other plants with showy flowers is desirable in all plant communities for the benefit of native pollinators. Spraying or other control of noxious weeds shall be done on a "spot" basis, where possible.

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the Illinois Natural Resources Conservation Service State Office or visit the electronic Field Office Technical Guide (http://efotg.nrcs.usda.gov).

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Additional Criteria to Provide Specific Cover Types for the Desired Wildlife Species.

CROPLAND

The Illinois Wildlife Habitat Evaluation should be consulted for minimum criteria for cropland recommendations for wildlife.

CONSERVATION CROPPING SEQUENCE (328), CONTOUR BUFFER STRIPS (332), STRIP CROPPING (585), and CONSERVATION TILLAGE (329), can provide positive habitat values. Use of a diversified crop rotation and reduced tillage, especially no tillage after harvest until spring, will benefit wildlife.

The introduction of cover types and plant diversity increase the habitat values of cropland. FIELD BORDER (386) and GRASSED WATERWAYS (412) can introduce a valuable grassland component into cropfield situations when beneficial species and management are used. See Field Border Wildlife Job Sheet (386w) and Grassed Waterways Wildlife Job Sheet (412w) for more information. Native plants are encouraged since they are well-adapted to sites, less invasive, and likely to provide quality habitat with less long-term maintenance.

RIPARIAN FOREST BUFFER (391) AND HEDEGROW PLANTING (422) practices placed in or adjacent to cropland can increase the cropland value for wildlife by adding a tree and shrub component, where appropriate.

Maintain existing cover within or adjacent to cropland such as grown up fence rows, thickets, idle grassland, old fields and woody draws.

Reduced/eliminated chemical use will allow significant growth of annual plants, thus enhancing the cropfield values for wildlife.

GRASSES, LEGUMES AND FORBS Development

High quality nest and brood cover for grassland species of wildlife are critically needed cover types for upland wildlife in Illinois. Native plants and communities are encouraged since they are well-adapted to sites, less invasive, and likely to provide quality habitat with less long-term maintenance.

NRCS, Illinois October 2010

However, due to cost, availability, and landscape position, native plants may not be feasible in all situations.

CONSERVATION COVER (327) or RESTORATION and MANAGEMENT of DECLINING HABITATS (643) will be used to develop grassland cover for wildlife. Seeding mixes for wildlife will contain at least 3 species with at least one species that is a legume.

Eradication of introduced invasive plant species is recommended to provide suitable conditions for grassland development.

Interseeding of legumes and forbs into existing grass stands can provide a needed food source and add plant diversity to attract beneficial insect populations.

CONSERVATION COVER (327) will be used for appropriate seeding mixtures/techniques for the reestablishment of legumes into existing grass stands.

Management

Used alone or in combination with other techniques, mechanical methods can successfully manipulate successional stages of habitat. See EARLY SUCCESSIONAL HABITAT DEVELOPMENT/MANAGEMENT (647) and RESTORATION and MANAGEMENT of DECLINING HABITATS (643) for additional information.

Strip Disking

Strip disking (2-4" deep leaving at least 50% bare soil) of existing stands (greater than 4 years old) may be necessary to increase the amount of open ground and encourage a diverse plant community of annual and perennial plants. Disk between October 1 and April 15. Alternate disked strips 75' wide or less, with buffer strips at least 2 times the disked width, across the field on contour/cross-slope. Rotate disked and undisked strips on a 3 year or longer rotation. Disking shall be done within tolerable soil loss limits. Use Strip Disking Job Sheet 647A for planning site specific strip disking applications.

Mowing

Annual mowing or mowing of entire stands is discouraged since mowing greatly decreases plant diversity and reduces residual cover available for the following nesting season. If RECEIVED

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mowing is necessary to maintain legumes, reduce and control noxious weeds and woody plants, two options are available:

- 1) Mow once, using a rotary or flail mower, during August. Most ground nesting wildlife will have completed their nesting cycle yet there is still growing season remaining to allow residual growth. Mow no more than one-third of the field every year alternating mowed and unmowed strips at least 30 feet wide or wider. Rotate mowed strips across the field every year. Mow cool season grasses no shorter than 6 inches. Native warm season grasses should be mowed no shorter than 8 inches.
- 2) A second option for mowing would be strip mowing in the spring. Mowing should be done March 15 to April 15 to encourage vegetative diversity without greatly impacting ground nesting activities or loss of fall food plants. Mow at least 6 inches high and no more than one-third of the field every year. Rotate mowed strips across the field every year.

If mowing is used as a habitat management practice, residues will be thoroughly shredded to prevent excess litter accumulation.

Prescribed Grazing

Use PRESCRIBED GRAZING (528) to manipulate plant succession, reduce ground litter, and provide dusting areas. Livestock can be beneficial to maintaining the quality of herbaceous cover and controlling invasive plants when managed in accordance with a grazing plan with wildlife habitat management as the primary objective. The grazing technique requires careful management to prevent overgrazing. Timing of haying and grazing will avoid peak periods of wildlife nesting and allow the establishment, development, and management of vegetation for the intended purpose. When possible, rotational grazing should be utilized to benefit wildlife during rest periods.

Prescribed Burning

Use PRESCRIBED BURNING (338) to remove excess litter, which can reduce the quality of wildlife habitat. Controlled fire can allow germination of seed bearing annuals, increase plant species diversity, control unwanted woody cover, and open up the stand for meyement of small animals and birds. Burn no

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more than one third of the grassland acres in an area, in any one year. However, exceptions can be made to burn up to 50 percent of an area in cases of small fields and when weather conditions have prevented burning in previous years. Consider the effect of the timing of the burn on wildlife species using the grassland.

Herbicide Treatment

Use selected herbicides to manipulate plant succession and improve habitat diversity. Careful planning and care in application are required in the use of chemicals to improve existing habitat. Selection of a product should be based on several factors including product effectiveness, non-target species impacts, toxicological risks, and off-site movement of chemicals. See Conservation Planning Standard PEST MANAGEMENT (595) and Job Sheet 647B Herbicide Application for Plant Succession Management for recommendations and precautions.

WOODLAND AND SHRUBLAND

Development

Species recommendations will be based on landowner objectives and site potential. Planting trees and shrubs has the potential of adversely affecting non-target species. Careful consideration must be given when planting trees and taller shrubs in historic prairie region of the state. Soils and site potential should guide the plant species selected. See RESTORATION AND MANAGEMENT OF DECLINING HABITATS (643) for more information.

Woody plantings will follow the criteria and guidelines in HEDGEROW PLANTING (422), TREE/SHRUB ESTABLISHMENT (612), WINDBREAK/SHELTERBELT ESTABLISHMENT (380). These standards provide guidelines for clump and block plantings and reinforcement of existing woody cover.

Where dense woody cover is lacking, but necessary to meet species objectives, areas(s) comprising native shrubs can be established. Plant clumps of native shrubs, 1,500 square feet to ¼ acre in size, for each 5 to 40 acres of habitat that lacks woody cover. See Quail Covey Headquarters Job Sheet 645B for more information and specifications.

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Management

Manipulation of woody tree and shrub stands to achieve early successional plant composition encourages re-growth and regeneration (suckering) of palatable and nutritious vegetation beneficial to large mammals. Browse management also increases plant diversity, which supports a variety of other species. Browse management can be accomplished by mechanical (shearing, hand-cutting, mowing, etc), or prescribed burning.

Encourage old growth trees (greater than 80 years or 16 inches diameter breast height (dbh) by deferring timber activities to maximize wildlife values on at least 10 percent of the forested area.

Forest Stand Improvement

Removal of competition will provide sunlight and growing space necessary for full crown development of the target species. FOREST STAND IMPROVEMENT (666) will be used for recommendations on thinning extent and techniques.

Preserve and create through Forest Stand Improvement, den trees (trees with cavities large enough to shelter wildlife) and snags (standing dead trees and limbs) which serve many purposes for forest wildlife species. For upland interior forested areas, leave at least 6 snags and 7 den trees per acre. Ideally, leaving 1 den tree greater than 20 inches dbh, 4 snags and 4 den trees in the 10 - 20 inches dbh range, and 2 snag trees and 2 den trees less than 10 inches dbh per acre in order to provide an optimal mix. Floodplain forest areas should have even more, with optimum levels of 12 snags and 25 den trees per acre.

Maintain non-invasive native vines to the maximum extent possible. Leave at least 4 - 6 live native vines per acre on trees. Leave vines on den trees and trees that are not considered crop trees for other purposes.

Livestock Exclusion and Access Control

Livestock shall be excluded from woodland when forest succession is reliant upon natural regeneration of seedlings. Conservation practice standard USE EXCLUSION (472) can be used to prevent improper use of wooded areas by livestock. To improve woodland edge

NRCS, Illinois October 2010 habitat and adjacent grassland habitat, install the fence with at least a 30 foot setback from the woodland edge.

Woodland Edge Feathering

Edge feathering can be used to create a transitional habitat zone of shrubs, vines and herbaceous vegetation between cropland or grassland and the overstory canopy along a woodland edge. There are three methods to feather the edge of woodland.

- Thin overstory trees in the first 60 to 90 feet of the woodland edge. The regrowth and sprouting that result will provide benefits for 5 to 10 years. Invasive species (e.g., bush honeysuckle and multiflora rose) must be controlled before the overstory is thinned.
- Create a feathered edge along woodland by planting shrubs and grasses in the open field along the woodland edge. Plant at least 2 rows of shrubs along the woodland edge and a field border along the cropland edge to make up a zone at least 30 feet wide.
- Natural regeneration. Shrubs, brambles and vines may be used where seedlings are present and cessation of mowing or cultivation will allow desired vegetation to grow. Where invasive species are present (e.g., bush honeysuckle and multiflora rose) plant desired species rather than allowing natural regeneration.

To maintain maximum values of the feathered edge, the area should be re-treated when more than 50 percent of vegetation in the transitional zone exceeds a height of 15 feet. See Woodland Edge Feathering Job Sheet 645D for more information and specifications.

WILDLIFE CORRIDORS

Corridors are established to connect isolated and fragmented habitat areas and increase the number of connections between habitats. Wildlife corridors are often planned as field borders, hedgerows, windbreaks, etc.

Wildlife corridors are developed by establishing a band of vegetation suitable for wildlife cover that connects one habitat area with another. When possible, vegetative composition of a corridor should be similar to

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the habitat areas that are being connected. See FIELD BORDER (386) and Field Border Wildlife Job Sheet (386w) for more information.

For species selection, see Biological Technical Note #22 Planning Tree and Shrub Plantings for Wildlife, and conservation practice standard 327 CONSERVATION COVER for plants that provide wildlife habitat and site requirements for each plant species.

The minimum width for a wildlife corridor is 30 feet to reduce excessive predation on wildlife using these edge habitats.

Root pruning can be used to prevent encroachment of woody material into cropfield edges. Root pruning is used to maintain crop yields adjacent to woody fencerows or woodland. Root pruning on a 3 - 5 year interval prevents crop yield reduction.

When corridors are established and managed for wildlife in an area that is grazed, the edge will be fenced to exclude livestock.

Herbaceous corridors should be treated to control woody vegetation. If mowing is used, mow only once in August. If mowing is used as a habitat management practice, residues will be thoroughly shredded to prevent excess litter accumulation.

Additional Criteria to Provide Structures for Nesting and Shelter for Desired Wildlife Species.

Artificial nest structures can provide nesting opportunities for cavity or roost nesting birds. Design, specifications, and construction shall be consistent with plans included in the IDNR "Wood Projects for Illinois Wildlife", NRCS Fish and Wildlife Habitat Management Leaflet #20 Artificial Nesting Structures at:

http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=25175.wba or other designs specified by a technical wildlife agency.

Brush piles of at least 10 - 15 feet in diameter and 6 - 8 feet high can be developed with the material left from forestry practices. Brush piles can provide shelter for many wildlife species from predators and severe weather. Rock piles can be built to benefit amphibians and reptiles. See Wildlife Brush Piles Job Sheet 645C for more information and specifications for constructing both brush piles and rock piles.

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Additional Criteria to Provide a Variety of Foods for the Desired Wildlife Species.

Many wildlife species depend on and prefer native weed seeds and wild fruits for winter food. In many of Illinois' agricultural landscapes food plots may be unnecessary because waste grain and weed seeds are available to wildlife for food. However, additional high-quality food can be provided in the form of unharvested grain crops, green browse food plots or standing grain food plots.

Strips of unharvested grain can be left along the edges of adjacent other cover types. Strips should be at least 30 feet wide (12, 30 inch rows) and at least one-quarter acre in size

Food plots should be located on the least erosive areas of each field. Soil loss must be maintained within tolerable limits (T). Adequate vegetative cover must be developed and maintained to provide both wildlife and erosion control benefits. If food plots are relocated or discontinued, the site will be reseeded after a year of fallow.

Plots may be located on slopes greater than 5 percent provided soil losses do not exceed tolerable limits (T). Plots planted on the contour are recommended.

The food plot should be adequately fertilized. Proper fertilization will help ensure successful establishment and growth of the food plot.

Weed control may not be required as some weeds such as foxtail and ragweed actually benefit wildlife by providing higher protein and greater number of seeds than domestic grains.

Food plots will be protected from livestock grazing.

Plantings shall be seeded at proper time to ensure maturity of food plants.

See Illinois Wildlife Food Plot Job Sheet 645A for additional information and specifications.

Additional Criteria to Provide Water Requirements for the Desired Kinds of Wildlife Species.

Water requirements for Illinois' upland wildlife species can be met with one year-round

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source of surface water within one-half mile of the habitat. To develop sources of water for wildlife, use the WATERING FACILITY (614) Standard or POND (378) Standard.

CONSIDERATIONS

The practice may affect the target species as well as non-target species through mechanisms such as hunting, predation, disease transmission, nest parasitism, etc. Consider effects of the practice on species with declining populations.

Wildlife population control may be necessary to protect and maintain certain habitats, which is a responsibility of the landowner. State and federal regulations may apply to population control methods.

Undisturbed areas conserved at a sufficient extent during management activities may sustain disturbance-intolerant animals and plants.

Other conservation practices may be utilized in conjunction with the practice to create a wildlife management plan such as:

Conservation Cover (327) Early Succession Habitat

Development/Management (647)

Field Border (386) Filter Strip (393)

Forage Harvest Management (511)

Forest Stand Improvement (666)

Hedgerow Planting (422)

Pasture & Hay Planting (512)

Pond (378)

Prescribed Burning (338)

Prescribed Grazing (528)

Restoration and Management of Declining Habitats (643)

Riparian Forest Buffer (391)

Riparian Herbaceous Cover (390)

Tree/Shrub Establishment (612)

Use Exclusion (472)

Watering Facility (614)

Windbreak/Shelterbelt Establishment (380)

PLANS AND SPECIFICATIONS

Plans and specifications for the practice shall be prepared by persons with adequate training in the fields of wildlife management, biology, or ecology.

NRCS, Illinois October 2010 Written specifications, schedules and maps shall be prepared for each planning area and each habitat type.

Specifications shall:

- Identify the amounts and kinds of habitat elements, locations and management actions necessary to achieve the client's management objectives.
- Describe the appropriate method, timing and intensity of management needed to produce the desired habitat conditions and sustain them over time.

Specifications shall be transmitted to clients using NRCS approved specifications sheets, job sheets, or customized narrative statements included in the conservation plan.

OPERATION AND MAINTENANCE

The following actions shall be carried out to ensure that the practice functions as intended throughout its expected life:

- Evaluate habitat conditions on a regular basis in order to adapt the conservation plan and schedule of implementation.
- Annually inspect and repair structural or vegetative components of the practice.

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NRCS, Illinois October 2010

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

EARLY SUCCESSIONAL HABITAT DEVELOPMENT/MANAGEMENT (Ac.)

CODE 647

DEFINITION

Manage plant succession to develop and maintain early successional habitat to benefit desired wildlife and/or natural communities.

PURPOSE

To provide habitat for species requiring early successional habitat for all or part of their life cycle.

CONDITIONS WHERE PRACTICE APPLIES

On all lands that are suitable for the kinds of desired wildlife and plant species.

CRITERIA

Management will be designed to achieve the desired plant community structure (e.g., density, vertical and horizontal cover) and plant species diversity.

Where planting is needed, regionally adapted plant materials will be used.

Site preparation, planting dates, and planting methods shall optimize survival.

Planting of noxious weeds and invasive species is prohibited.

Measures must be provided to control noxious weeds and invasive species.

If using chemical methods of control, Pesticide Screening Tool (WinPST) shall be used to assess risks, and appropriate mitigation to reduce known risks shall be employed.

To benefit insect food sources for grassland nesting birds, spraying or other control of noxious weeds will be in a targeted manner through the use of spot spraying, mechanical or hand wick applicators, or other approved methods to protect grasses, forbs and legumes that benefit native pollinators and other wildlife.

Minimize soil disturbance in natural communities where soil integrity is essential, on steep slopes, on highly erodible soil, and where establishment of invasive species is likely.

When grazing is used as a management tool, a prescribed grazing plan developed to specifically meet the intent and objective(s) of the practice standard is required.

Management will be timed to minimize negative impacts to wildlife. Management practices and activities shall not disturb cover during the primary nesting period for grassland species (April 15 — August 1). Exceptions can be allowed for periodic burning, strip disking, selected herbicide techniques, selected mechanical removal or mowing when necessary to maintain the health of the plant community. Mowing may be needed during the plant establishment period to control undesirable weeds and growth of woody vegetation.

Vegetative manipulation to maximize plant and animal diversity can be accomplished by disturbance practices including: strip disking, selected herbicide techniques, mowing, prescribed burning, prescribed grazing, woodland edge feathering or a combination of these. Additional criteria for specific disturbance practices applied for the purpose of Early Successional Habitat Development /Management are:

Strip Disking - Light disking strips of existing grass stands, typically greater than 4 years old, may be required to increase the amount of open ground and encourage annuals (foxtails and ragweeds). The result will be a diverse plant community of both annuals and perennials.

 Disk strips 2-4 inches deep to expose approximately 50% bare ground after disking.

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Conservation practice standards are reviewed periodically and updated if needed. To obtain the guntant Service of this standard, contact your Natural Resources Conservation Service State Office or visit the electronic Field Office Technical Guide.

NRCS, Illinois April 2011

- Disk between October 1 and April 15.
- Alternate disked strips of 75 feet or less in width, with undisturbed strips a minimum of 2 times the disked width, across the field on the contour or across slope.
- Rotate disked and undisked strips on a 3 year or longer rotation.
- Disked strips shall not exceed the tolerable soil loss
- See Strip Disking Job Sheet 647A for additional information and specifications.

<u>Herbicide Techniques</u> - Selected herbicides can be used to effectively manipulate plant succession, control brush, reduce plant competition, control exotic weeds, and improve habitat diversity.

- Careful planning and care in application are required in the use of herbicides to improve existing habitat. Selection of a product shall be based on several factors, including: (a) product effectiveness, (b) non-target species impacts, (c) toxicological risks, and d) off-site movements of chemicals.
- Herbicides are to be applied only for the uses listed on the container label. Follow all directions and precautions. See conservation practice standard Pest Management (595) for recommendations and precautions.
- See Herbicide Application for Plant Succession Management Job Sheet 647B for additional information and specifications.

<u>Mowing</u> – Mowing will only be used where other management techniques are not feasible.

- Mowing shall be applied in the spring prior to the nesting season (April 15) or during the month of August.
- After the stand is established mow no more than 50% of the stand in any given year. Mowing the whole stand may be necessary during the first two years of establishment for weed control.
- Mow in strips to maintain cover. Rotate mowed strips across the field from year to year.

NRCS, Illinois April 2011

- Minimum standing strip width shall be 30 feet. Strips 100 feet wide or wider are preferred for wildlife escape cover.
- To control woody vegetation, mow cool season grasses no shorter than 6 inches. Native warm season grasses should be mowed no shorter than 8 inches or no shorter than 10 inches if mowed near the end of the growing season.
- Residues from mowing shall be thoroughly shredded and evenly distributed to prevent excess litter accumulation.

<u>Prescribed Burning</u> – Burning may be required to remove excess litter, stimulate germination of seed bearing annuals, increase plant species diversity, control unwanted woody and herbaceous vegetation, and open up the stand for movement of small animals and birds.

- Prescribed Burning can only be planned by qualified personnel according to criteria in the Prescribed Burning (338) standard.
- Frequency of burning will not exceed once every third year.
- Burn no more than one third of the area in any one year. However, exceptions can be made to burn up to 50 percent of an area in cases of small fields, and when weather conditions have prevented burning in previous years.
- See Prescribed Burning Fact Sheet 647FS for more information and specifications.

<u>Prescribed Grazing</u> - Domestic livestock may be used to manipulate plant succession. Grazing requires very careful management to assure the site is not over grazed.

 A grazing plan (meeting criteria in conservation practice standard Prescribed Grazing (528)) will be developed for the intended purpose of the practice.

<u>Woodland Edge Feathering</u> - Woodland edges can be managed for early successional habitat through vegetation manipulation.

 Thin overstory trees in the first 60 to 90 feet of the woodland edge. The regrowth and sprouting that result will provide benefits for 5 to 10 years. Invasive species must be controlled before the overstory is thinned.

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- To develop early successional habitat adjacent to woodland, allow natural revegetation of native shrubs, brambles, grasses and forbs along a woodland edge to develop an area of early successional habitat at least 30 feet in width. Invasive species in the area must be controlled before allowing natural revegetation. Protect the area from disturbance until established.
- Early successional habitat along woodland edges can also be created by planting shrubs and grasses in the open field along a woodland. Plant at least 2 rows of shrubs along the woodland and a field border of grasses and forbs along the cropland edge to make up an area with a total width of at least 30 feet.
- When more than 50% of the trees in the woodland edge become taller than 15 feet high, reapply the practice.
- See Woodland Edge Feathering Job Sheet 645D for more information and specifications.

CONSIDERATIONS

The practice should be applied periodically to maintain the desired early successional plant community and rotated throughout the managed area.

Design and install the treatment layout to facilitate:

- operation of machinery
- use of natural firebreaks or development and maintenance of firebreaks when prescribed burning.

When selecting plants and designing management for the practice, consider the needs of pollinators and incorporate to the maximum extent practicable.

Managing for early successional plant communities is beneficial if not essential for less mobile animal species. The less mobile the species must have all of the required habitat elements within the small area where they live.

Consider operation of machinery used on the site in the layout and design of firebreaks.

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Whenever possible, lay out strips to have some multiple or full width passes by all farm implements.

PLANS AND SPECIFICATIONS

Written specifications, application schedules and maps shall be prepared for each site. Specifications shall identify the amounts and kinds of habitat elements, locations and management actions necessary to achieve management objectives.

Specifications shall be transmitted to clients using approved specification sheets, job sheets, and customized practice narratives or by other written documentation approved by NRCS.

OPERATION AND MAINTENANCE

The following actions shall be carried out to insure that the practice functions as intended throughout its expected life. These actions include normal repetitive activities in the application and use of the practice.

Occasional disturbance may be incorporated into the management plan to ensure the intended purpose of the practice.

Any use of fertilizers, pesticides and other chemicals shall not compromise the intended purpose.

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NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

PRESCRIBED BURNING

(Acres)

DEFINITION

Controlled fire applied to a predetermined area.

PURPOSES

- · Control undesirable vegetation.
- Prepare sites for harvesting, planting or seeding.
- · Control plant disease.
- Reduce wildfire hazards.
- · Improve wildlife habitat.
- Improve plant production quantity and/or quality.
- · Remove slash and debris.
- Enhance seed and seedling production.
- Facilitate distribution of grazing and browsing animals.
- · Restore and maintain ecological sites.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on all lands as appropriate.

CRITERIA

General Criteria Applicable to All Purposes

Cooperators will be cautioned to burn in accordance with applicable federal, state, and local laws and regulations. They must understand that they may be liable for damages caused by fire escaping from their land or for damage caused to others from inadequate smoke management. They may also be responsible for fire suppression cost, should the fire escape the designated area.

The procedure, equipment, and the number of trained personnel shall be adequate to accomplish the intended purpose.

The expected weather conditions, human and vehicular traffic that may be impeded by heat or smoke, liability (e.g., utility lines) and safety and health precautions shall be integrated into the timing, location and expected intensity of the burn.

Burn crew shall wear clothing of fire retardant or natural materials (Nomex, cotton, wool, leather gloves and leather boots, etc.) including long sleeved shirt, long pants, hard hat (if burning in forest, shrub or woodland), gloves, high top boots and eye protection.

All persons working on a prescribed burn must be physically capable of performing the activities associated with prescribed burning.

Timing of burn will be commensurate with soil and site conditions to maintain site productivity and minimize effects on soil erosion and soil properties (i.e., structure, soil moisture).

Weather parameters and other data that affect fire behavior should be monitored during the burn. Carbon release should be minimized by the timing and burn intensity.

Identify location of utilities such as electric power lines and natural gas pipelines to prevent damage to the utility and avoid personal injury.

Identify all expected and potential smoke impacts before the burn and continue monitoring during the burn.

All necessary permits must be obtained, including the IEPA Open Burning Permit, before implementation of the practice.

Cooperators without experience in burning will be advised to seek assistance from persons who have had training or experience in applying the practice.

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact your Natural Resources Conservation Service State Office or visit the Field Office Technical Guide.

The landowner or his/her designee must be on-site throughout the prescribed burn period. NRCS personnel will not serve as the landowner's designee.

Additional Criteria to Control Undesirable Vegetation

Specify applicable target species to be suppressed and potential of fire damage to non-target species on Illinois Job Sheet 338-JS, Section 2 - Purposes for Conducting the Prescribed Burn.

Time of burning to suppress deciduous woody species should be in late spring, when the target species have just fully leafed and carbohydrate reserves are at their lowest, or in late fall.

Coniferous species, such as cedar, should be burned after the herbaceous species to be improved starts growth. The best suppression on coniferous species is achieved when they are small, from one to three feet tall. Larger trees will need to be cut prior to burn for best control.

Frequency of burning should be based on regrowth of target species, weighed against forage and/or wildlife habitat considerations.

Additional Criteria to Improve Wildlife Habitat

Burning for maintenance of ungrazed wildlife areas or grass stands under long-term retirement programs, should be carried out once every three to four or more years, depending upon amount of litter accumulation and vigor of stand. Upland habitats with droughty soils have longer rotations than more productive wet mesic habitats.

Do not burn between April 15 and August 1 in areas likely to be utilized by ground nesting birds.

Specify wildlife preferred plant species to be improved or enhanced and potential of fire damage to other desirable species on Illinois Job Sheet 338-JS, Section 2, Purposes for Conducting the Prescribed Burn.

Time of burning should be just prior to or soon after dormancy break of wildlife preferred species in the spring. A good rule of thumb is to burn when the wildlife preferred species have no more than one inch of new growth.

NRCS - Illinois January 2013 Limited wildlife habitat in the area should dictate limiting the area to be burned to less than 1/2 of the total area managed for wildlife habitat of the habitat type being burned.

Additional Criteria to Improve Plant Production Quantity and/or Quality

Frequency of burning should not be more than once every three years, to stimulate vigor and production of warm-season grasses or to maintain diversity of mixed-grass communities.

Specify on the burn plan desired species to be maintained or restored. Time of burning should be just prior to or soon after dormancy break of desired species in the spring.

Generally, grass species are burned in spring when the desired grass has achieved 1" of new growth, usually from late February to late March for coolseason species and from early April to early May for warm-season species.

Additional Criteria to Facilitate Distribution of Grazing and Browsing Animals

Frequency of burning will be based on extent and duration of grazing responses, but should not be more than once every three years.

Grazing areas and desired species should be adjusted in relation to grazing pressure.

Time of burning should be just prior to or soon after dormancy break of desired species in the spring.

Additional Criteria to Restore and Maintain Ecological Sites (savanna and woodland communities)

Restoration of a savanna and/or reduction of aggressive nondesirable plants may require yearly or every other year burns for up to six years to open up the canopy, stimulate oak reproduction, and retard invader species. Once accomplished, limit burns to 5 to 15 year intervals for savannas.

Burn when desirable trees are dormant and more resistant to fire.

Keep flame lengths (scorch heights) less than 2 feet near the trunks of desirable trees. Fires with

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six foot scorch heights or higher will kill even larger (>11" diameter breast height (dbh)) oak trees.

Desirable oak saplings should be allowed to grow to 3-4" dbh before burning the area.

Dead wood left to burn can sterilize underlying soil for several years. Avoid burning brushpiles and downed logs by removing the material out of the burn area. Or, protect the dead wood with a firebreak and burn the area when conditions allow for a cooler fire and lower flame lengths to reduce the risk of igniting the dead wood.

CONSIDERATIONS

Prescribed Burning is not meant to be an annual management practice. Burn only to meet a specific management objective.

Precautions are needed to avoid air contamination from toxic substances or poisonous plants that may exist in an area to be burned. Smoke from burning poison ivy and other poisonous plants can be toxic to individuals and animals.

Burn when the vegetation to be burned is dry enough to carry a fire well, but while the soil surface is still damp to the touch. Good soil moisture helps to keep the soil temperature low during the burn.

Late fall and winter burns generally favors the forb component in mixed stands and is useful in improving wildlife habitat. However, fall and winter burns can leave the site vulnerable to erosion for long periods.

Additional Considerations for Reduction and Dilution of Emissions (smoke management)

Increase combustion efficiency using backing fires, burning dry fuels, use of burn piles or windrows and rapid mop-up.

Burn when conditions are good for dispersion of emissions (adequate atmospheric mixing height and sufficient transport wind speeds).

Reduce area burned by only burning concentrations of fuel, or mosaic burning, rather than 100% of the area.

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Reduce fuel loading by burning more frequently, or by mechanical removal or processing of part of the fuel such as haying, grazing, biomass utilization and firewood sales.

Reduce fuel consumed by burning when non-target fuels are too moist or green to burn (wet large woody debris and moist litter and/or duff).

Schedule burn before new fuel is produced (before litter fall or green-up of vegetation).

PLANS AND SPECIFICATIONS

A detailed burn plan for the prescribed burn area must be prepared with the landuser, signed by the landuser, and approved according to policy prior to the burn. Illinois Job Sheet 338-JS Prescribed Burning Plan will be used for documentation if developed by trained NRCS employees. Other trained professionals may use Illinois Job Sheet 338-JS or another plan format that contains the same information as Illinois Job Sheet 338-JS.

Conditions for the fire prescription will be determined using the table entitled "Acceptable Conditions for Prescribed Burns," Section 4, in Illinois Job Sheet 338-JS, Prescribed Burn Plan. Relative humidity, wind speed, and temperature are specified in the table. Winds must be relatively steady in velocity and direction. If winds are gusty and/or shifting more than 45 degrees from the prevailing direction, conditions are out of prescription, regardless of other factors.

Particulate matter 2.5 (PM 2.5) Landusers conducting a prescribed burn near or within Non-Attainment Areas in Illinois (http://www.epa.gov/air/oaqps/greenbk/ilmo25.html) will monitor the Air Quality Index (http://www.epa.state.il.us/air/aqi/index.html) and delay burning if the Air Quality Index is "Orange" or worse.

Fuel load will be at least 2,500 pounds per acre of fine fuel (dry grass and litter) with at least 50% standing (except for heavy fuel loads). Fuel loads above 10,000 pounds per acre of fine fuels, under normal circumstances, will have high flames and require additional resources to conduct the burn safely. Fuel conditions will be documented in Section I., Description of Burn Area, in Illinois Job Sheet 338-JS.

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Remove all volatile woody species over 4 feet in height within 50 feet of the primary firebreak. Where removal of certain trees is not feasible, branches will be pruned to at least 2 times the expected flame length and residues scattered to assure fire does not reach the canopy of these trees.

Soil moisture will be sufficient to ensure protection of root crowns and ensure plant regrowth following burning. Soil moisture will be moist to the touch.

Erosion control measures shall be planned to prevent sediment from leaving the site where bare ground firebreaks are established or the burned area is highly erodible with little vegetation response expected. See NRCS Conservation Practice Standards 327 Conservation Cover, or 342 Critical Area Seeding, for vegetation establishment and 655 Forest Trails and Landings, for techniques to control erosion where permanent firebreaks are installed in woodland.

Firebreaks will be utilized to contain fire in the area to be burned. Mechanical, chemical, wetline, burned, natural, or structural firebreaks will be used alone or in combination to contain the burn. Refer to NRCS Conservation Practice Standard 394 Firebreak, for design specifications for firebreaks.

Weather forecast will be obtained the day before the burn, the day of the burn and for the next 48hour period.

Weather conditions on-site will be observed and recorded immediately before and during the burn. Burning will be postponed, if weather conditions are, or are expected to fall, outside of the Prescribed Burn Plan prescription. The burn plan must prescribe weather conditions for the burn within the parameters of Illinois Job Sheet 338-JS Part 4.

Weather fronts - do not burn 12 hours before the passage of a weather front or after a weather front passes until the wind direction becomes constant.

Smoke management - burns will be planned, where possible, so winds will carry smoke away from roads, highways, airports, and occupied residences. When burning within 1 mile of an airport, secure necessary permission from airport authorities. Where smoke could affect sensitive

NRCS - Illinois January 2013 areas, do not burn until adequate safeguards have been taken (traffic control, notification, removal of residents sensitive to smoke), and do not burn unless atmospheric conditions will allow for the rapid rise and dispersal of smoke (mixing height >1,600 feet and transport wind speed ≥9 mph). Do not burn during temperature inversions that could trap smoke in the lower atmosphere. See the National Weather Service Fire Weather Forecast for mixing height and wind transport speed forecast.

Electrical or high power transmission lines within or adjacent to the site will be documented and the burn plan designed and applied so that large fire fronts or high, dense smoke columns will not cross under or contact these lines. Electrical discharge can occur due to high concentrations of carbon particles suspended in smoke columns. Wooden utility poles must be protected from burning. Natural gas pipelines and other buried utilities will be documented and measures taken to protect the utilities and to avoid personal injury.

Hazards, such as roads, residences, windbreaks, woodlands, electrical power poles and transmission lines, fences, flammable conduits, pipelines, organic soils, etc., will be identified and indicated on the plan map.

Access to the burn area by all unauthorized personnel will be restricted.

Burning will occur during daylight hours only. Time mop-up operations so mop-up will be completed before sunset. Extinguish all fire before leaving the site.

Threatened and endangered species that may occur on site will be identified and protected from fire and smoke. For prescribed burns in woodland, follow conservation measures established for the protection of the Indiana bat, Federal endangered specie. If bald eagles are nesting in the area, follow conservation measures established for their protection. For more information, see Illinois Amendment 2 to the National Environmental Compliance Handbook.

Notify adjoining landowners, utility companies with facilities within the burn unit (overhead or underground), and residences and businesses within the first mile of the anticipated airshed prior RECEIVED

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to burning. Notify airports, local fire department districts, and public safety officials with districts within one mile of the site. Also notify fire and safety district officials and airports within the one to five mile airshed prior to burning. Provide adequate signage to affected roads.

Prescribed Burning Specifications must adhere to all applicable NRCS policies in the General Manual (190 GM Part 413 Prescribed Burning) and Illinois supplements to the General Manual (190 - General Manual, Amend. IL-1) as well as all applicable state and local laws, ordinances, and regulations.

If the planner is not an NRCS employee and does not use the IL-338-JS to develop the burn plan, the plan must contain at a minimum the following:

- · Location and description of the burn area
- Pre-burn vegetation evaluation
- Resource management objectives
- · Identify sensitive areas
- Required weather conditions for prescribed burn
- Notification checklist
- Pre-burn preparation
- Equipment checklist
- · Personnel needs and job assignments
- Safety requirements
- Burning and ignition method to be used
- · Firing sequence
- Post-burn evaluation and management criteria
- · Approval signatures
- Signature by the landowner that they have been notified that they are liable for any damages as result of the prescribed burn.

Landowner or land operator will obtain necessary approval, permits, and variances prior to conducting the prescribed burn.

The Prescribed Burn Plan is specific to the area and for the burning season planned. If the plan is to be used for a subsequent burn season the plan will be revised to address the current situation.



OPERATION AND MAINTENANCE

The kinds and expected variability of site factors (e.g., fuel condition and moisture content, weather conditions, human and vehicular traffic that may be impeded by heat or smoke, liability, and safety and health precautions) shall be monitored during the operation of this practice. Sufficient fire suppression equipment and personnel shall be available commensurate with the expected behavior of these factors during the time of burning to prevent a wildfire or other safety, health or liability incident.

To achieve benefits of the prescribed burn, other practices in a Conservation System need to be carried out as planned.

Under poor growing conditions, low plant vigor, and/or downward trend, range or pasture will require one full growing season of deferment from grazing, or incorporation into a prescribed grazing system.

Under good growing conditions and good plant vigor, grazing can begin as soon as cool-season grasses attain 6 to 8 inches of new growth and warm-season grasses attain 10 to 12 inches.

PERFORMANCE CRITERIA

The practice will be completed when the prescribed burn has been carried out according to the design specifications and the desired resource management objectives have been achieved or identified resource problems have been solved.

REFERENCES:

Open Burning, IL. Admin. Code, Title 35, subtitle B, Chapter I, Subchapter I, Part 237. See Subchapter I, Open Burning, at http://www.ipcb.state.il.us/documents/dsweb/Get/D

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Natural Resources Conservation Service ILLINOIS CONSERVATION PRACTICE STANDARD

FOREST STAND IMPROVEMENT

(Acre)

CODE 666

DEFINITION

The manipulation of species composition, stand structure, and stocking by cutting or killing selected trees and understory vegetation.

PURPOSES

- To increase the quantity and quality of forest products, e.g., sawtimber, veneer, wood fiber, poles, pilings, maple syrup, naval stores, nuts and fruits.
- · To harvest forest products.
- To initiate forest stand regeneration.
- To reduce the potential of damage from wildfire, pests, and moisture stress.
- To restore natural plant communities.
- To achieve a desired understory plant community.
- To improve aesthetic, recreation, and open space values.
- · To improve wildlife habitat.
- To improve water conservation and yield.
- To achieve a desired level of crop tree stocking and density.
- To increase carbon storage in selected crop trees.

CONDITIONS WHERE PRACTICE APPLIES

On forestland where competing vegetation hinders development and stocking of preferred tree and/or understory species or where some of the stand will be cut or killed for intended purposes.

CRITERIA

General Criteria Applicable to All Purposes

The harvest-regeneration strategy will be identified for all planned forest improvement harvesting:

- Uneven-aged management systems (singletree selection, group selection, coppice selection)
- Even-aged management (clear-cut, seedtree, shelterwood, coppice)

Preferred tree and understory species are identified and retained to achieve all planned purposes.

Spacing, density, size class, number, and amounts of trees and understory species to be retained will follow established guidelines for the intended purposes.

Stocking guidelines shall contain stocking in terms of crop trees, basal area, and/or trees per acre by species and size class distribution. For detailed information on crop tree selection and management see Plans and Specifications.

The method, felling direction and timing of tree cutting for harvesting shall facilitate efficient and safe tree removal and protect sensitive areas such as wetlands, riparian zones, cultural resources, and structures.

Forest stand improvement activities shall be performed to minimize soil erosion, compaction, rutting, damage to remaining vegetation and hydrologic conditions. For more information see practice standard FOREST TRAILS AND LANDINGS (655).

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APT Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

NRCS, Illinois July 2002 Slash and debris left on the site after treatment will not present an unacceptable fire, safety, environmental, or pest hazard. Such remaining material will not interfere with the intended purpose or other management activities.

Comply with applicable federal, state and local laws and regulations during the installation, operation and maintenance of this practice. Appropriate cultural resources review will be conducted before beginning any practice that results in soil disturbance.

Additional Criteria to Increase the Quantity and Quality of Forest Products

For species to retain for timber production see "Recommended Silviculture and Management Practices for Illinois Hardwood Forest Types" in References.

Crop trees to retain will be dominant or codominant, at least 25 feet tall, have a full, healthy crown, seedling origin or stump sprout originating within 6 inches of the ground, no epicormic branches on the lower stem, not leaning, without narrow-angled or low forks and an expected longevity of at least 20 years.

Kill any vines growing on crop trees intended for timber production. See <u>Controlling Undesirable Trees</u>, <u>Shrubs</u>, <u>and Vines in Your Woodland</u> in References. Apply the "cut stump" technique to prevent vines from resprouting.

Additional Criteria to Restore Natural Plant Communities

For more information on restoration of natural communities see practice standards RESTORATION AND MANAGEMENT OF DECLINING HABITATS (643) and WETLAND RESTORATION (657) and References.

Additional Criteria to Improve Aesthetic Recreation and Open Space Values

Crop trees to retain will be species that produce attractive flowers and/or colorful foliage, healthy crowns, good fall color, visible from travel ways or waterways, expected to live 20 years or more, possessing unique form or bark characteristics, having historical significance, or of particular interest to the landowner.

NRCS, Illinois July 2002 For additional guidelines refer to RECREATION AREA IMPROVEMENT (562) and RECREATIONAL TRAIL AND WALKWAY (568).

Additional Criteria to Improve Wildlife Habitat

For tree and shrub species to retain see HEDGEROW PLANTING (422).

Crop trees to retain will be dominant or codominant, have a full, healthy crown, a mast (fruit, seed or nut utilized as food by wildlife) producer and/or possessing a cavity or the potential for developing a cavity.

Retain all vines as a food source for wildlife.

Retain or create at least 3 brush piles per acre with material produced during improvement work. Hinged, partially cut "living brushpiles" should be included to provide long-lasting shelter. Brush piles are most effective near habitat edges rather than in the interior of a forested tract. Brush piles will need to be protected by a temporary, raked firebreak if prescribed burning is planned.

Low intensity prescribed fires may be used to improve/increase green browse for wildlife. Refer to practice standard PRESCRIBED BURNING (338). A prescribed burn plan (Job Sheet 338-JS) will be prepared and implemented by individuals possessing the appropriate level of Job Approval Authority.

CONSIDERATIONS

Silvicultural objectives and harvest-regeneration strategies may change over time and may be limited by prior management.

Successful regeneration of desirable species is usually dependent upon timely application of forest stand improvement and other practices, e.g., PRESCRIBED BURNING (338), FOREST SITE PREPARATION (490), TREE/SHRUB ESTABLISHMENT (612), PRESCRIBED GRAZING (528A), and USE EXCLUSION (472).

The extent, timing, size of treatment area, or the intensity of the practice should be adjusted to minimize cumulative effects (onsite and offsite), e.g., hydrologic and stream alteration, habitat fragmentation, nutrient cycling, biodiversity and visual resources.

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Potential landowner and operator liability should be assessed before forest stand improvement activities begin.

The practice should be timed to minimize disturbance of seasonal wildlife activities.

Consider wildlife food and cover needs when making modifications to forest composition and tree spacing.

Consider retention of selected dead and dying trees, including down material, to enhance wildlife habitat values.

Landowners should secure a written contract with any service provider that specifically describes the extent of activity, duration of activity, responsibilities of each party and amount and timing of payments for services provided.

Landowners planning to sell timber should: know the amount of timber to be sold through an inventory, receive sealed bids, obtain a signed contract with an Illinois licensed timber buyer, receive full payment before cutting begins, and supervise harvest operations. For further information and sample contracts see Here's How to...Write an Iron-Clad Timber Sale Contract in References.

Best results are often obtained by retaining the services of a professional forester to conduct forestry practices, particularly the sale of timber.

Consider environmental concerns such as threatened and endangered species and natural areas.

PLANS AND SPECIFICATIONS

Specifications for applying this practice shall be prepared for each site and recorded using approved specification sheets, job sheets, technical notes, and narrative statements in the conservation plan, or other acceptable documentation.

Selection and Management of Crop Trees

Crop trees are individual trees selected according to criteria that is based on species, form, crown size and position and other physical characteristics. Crop tree selection criteria have been developed for specific purposes such as timber production, wildlife habitat, water quality

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and aesthetics (see <u>Crop Tree Management in</u> <u>Eastern Hardwoods</u> in References).

Crop trees may be selected and released when a height of 25 feet or more or a diameter at breast height (dbh) of 4 inches is reached, which is usually at age 10 to 15 years. In most cases 50 to 75 crop trees will be released per acre. Landowner objectives and stand quality may result in as few as 5 to 20 crop trees released per acre, but never more than 100 trees per acre.

A crop tree inventory will provide an estimate of the number of crop trees and trees needing to be cut or killed per acre for planning purposes. Guidelines for conducting an inventory and completing a Crop Tree Tally Sheet can be found in Crop Tree Management in Eastern Hardwoods in References. Data collected should include species and dbh for both crop trees and trees to be killed or cut. For crop trees, record the criteria used for crop tree selection (e.g. timber, wildlife, water quality, and/or aesthetics).

After selecting and marking crop trees a "crown touching" release is performed by cutting or killing only those adjacent trees whose crowns touch the crown of the crop tree. It is not necessary to cut or kill trees that are overtopped by a crop tree, unless it is a large shade tolerant tree (sugar maple, basswood, beech) that may grow up into the crown of the crop tree.

In areas within a stand of trees where there are no suitable crop trees, do not cut any trees. In most cases crop trees will be at least 25 feet apart. Occasionally two crop trees may be left close to each other. Treat their crowns as a single crown and apply a crown-touching release.

Unwanted trees, shrubs and vines may be killed by any of the following means; cutting, girdling, frilling, stem injection, or basal bark spray. Foliar sprays can be used for small trees. For specific information about techniques for killing trees, including recommend herbicides, see Controlling Undesirable Trees, Shrubs, and Vines in Your Woodland in References.

NRCS, Illinois July 2002 In some instances, enough trees of suitable size may be cut to warrant a commercial timber sale.

Harvesting Timber to Improve Forestlands

Forestland may be in need of improvement due to past management practices such as improper grazing, poor cutting practices (high-grading), wildfire or a combination of the above. Many unmanaged forest stands become overstocked with shade tolerant tree species (sugar maple and/or American beech) or shrub species (pawpaw, honeysuckle, buckthorn), preventing regeneration of more desirable light demanding species. Often the best way to improve a forest stand is to selectively harvest some timber focusing on the removal of less desirable trees. Creating openings in the forest canopy will result in natural regeneration of desired tree species. Size of openings may range from one-half acre to about 5 acres in size. For detailed information on harvesting timber to improve and regenerate forestlands see Recommended Silviculture and Management Practices for Illinois Hardwood Forest Types in References.

OPERATION AND MAINTENANCE

Periodic inspections during treatment activities are necessary to ensure that objectives are achieved and resource damage is minimized. Follow-up and ongoing management activities will be needed to obtain desired results. See Recommended Silviculture and Management Practices for Illinois Hardwood Forest Types in References.

Crop tree release or forest stand improvement cutting may be repeated at 5 to 15 year intervals depending on site type and site quality. See Recommended Silviculture and Management Practices for Illinois Hardwood Forest Types in References.

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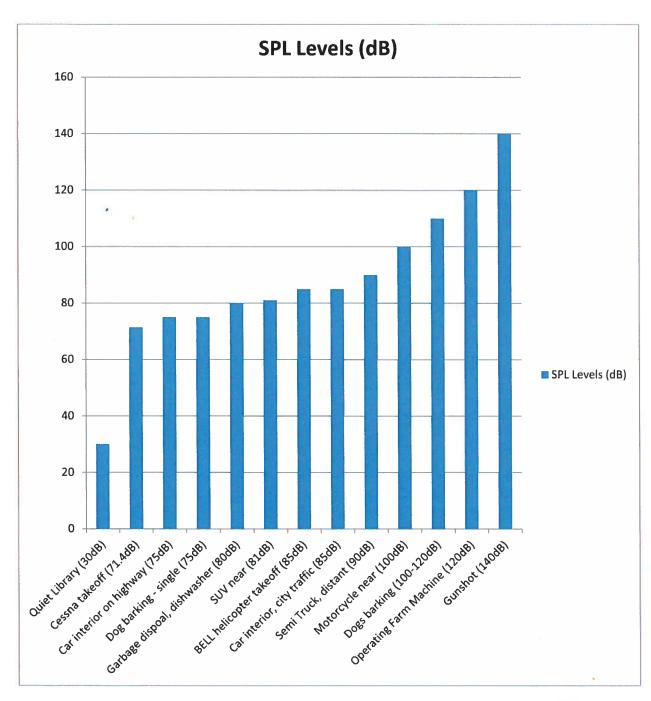
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CASES 687-AM-11 and 688-S-11 Petitioners Phillip and Sarabeth Jones

Jones' Restricted Landing Area Noise Comparison

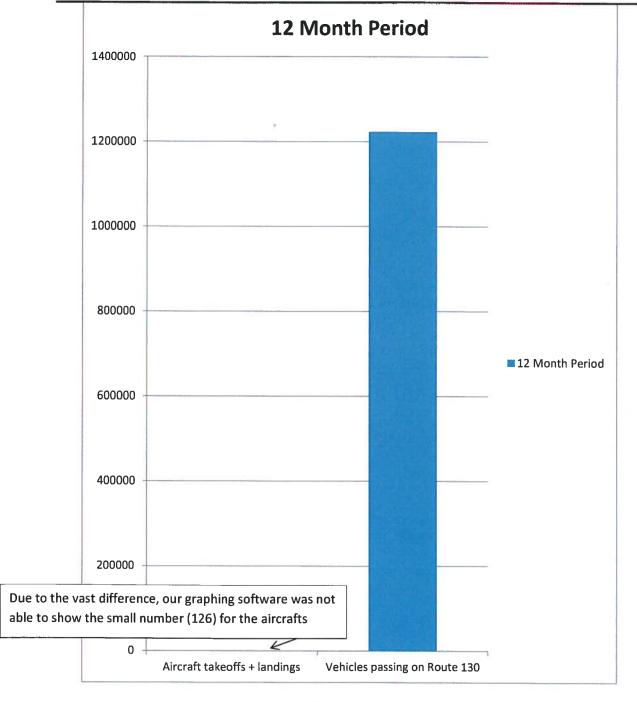


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CASES 687-AM-11 and 688-S-11 Petitioners Phillip and Sarabeth Jones

Jones' Restricted Landing Area Traffic Comparison



Aircraft takeoffs + landings: 126 Vehicles passing on Route 130: 1,222,750

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