



**Office of Resource Conservation
Special Wildlife Funds Grant Application
for
Illinois Wildlife Preservation Fund**

DNR use only
Application Number
11-L14W

Attachment B

(*) indicates a required field

I APPLICANT INFORMATION

| | | |
|------------------------------------------------------------------------------|---------------|-------------------------------------------------------|
| Applicant Name (*): Joseph A. Kath | | |
| Address (*): IDNR – Division of Natural Heritage | | City, State Zip (*): Springfield, Illinois 62702-1271 |
| Daytime Telephone (*): 217/785-8764 | Fax: 785-2438 | E-Mail: Joe.Kath@illinois.gov |
| Applicant Representative (*): Illinois DNR – Office of Resource Conservation | | Title: Endangered Species Manager |
| Applicant Signature (*): | | |
| Other Contact Person (Only if different from Applicant Representative) | | |
| Name: N/A | | Title: N/A |
| Daytime Telephone: N/A | | E-Mail: N/A |

II PROJECT DESCRIPTION

| | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------|------------------------------------|
| Classification (*): | <input checked="" type="checkbox"/> Management | <input type="checkbox"/> Site Inventory | <input type="checkbox"/> Education |
| Project Title (*): Solar powered pond aeration system for Alligator Snapping Turtle breeding pond located in Springfield, Illinois. | | | |
| Project Description and Comprehensive Justification (*): | | | |
| <p>As part of the IDNR approved recovery plan for the Alligator Snapping Turtle (AST), a breeding pond containing 25+ adult and juvenile ASTs was established on a private parcel in Springfield, Illinois. Some of the wild caught animals captured in Louisiana from 2007-2009 were placed in this pond in hopes that they would breed and begin to supply the Department with a steady stock of animals for future releases throughout southern Illinois as part of the recovery effort for this State endangered turtle. In the summer of 2009, a total of 202 eggs were harvested from this pond and hatchlings were successfully produced. In order to maintain the year round health of this pond and prevent massive icing in the winter, a compact, solar powered aeration device is needed.</p> <p>This project calls for the purchase of two (2) Pennington A-3, 20-Watt Solar Powered Aerators. These would be placed in the AST breeding pond and remain in continuous operation to benefit the overall health of the ASTs in this pond. See below:</p> <p>Oxygen is also needed at night in your pond for the fish, plants, and beneficial bacteria.</p> <ul style="list-style-type: none"> • No carbon footprint • Reduces odor • Promotes <i>facultative</i> vs. <i>anaerobic</i> bacteria and <i>single cell</i> vs. <i>stringy</i> algae. • Solar pond aerators can be used in remote locations, far from an electrical outlet. • You will never have to pay for the energy needed to run it. • These aerators will work just as well as other aerators using equal watts. <p>This Solar Powered Bubbler aeration systems operate 24/7 to aerate ponds, tanks, and lakes, as well as to air strip other polluted water bodies around the globe.</p> <p>Pond aeration suppresses algae growth, allowing humans and animals access to clean, clear water without being subjected to harmful toxins or the lingering effects of algaecides. Skimming or raking pond surfaces is repetitive, time-consuming work. After installing an aeration system, maintaining a pond's ecosystem is as easy as flipping a switch.</p> | | | |

III. BUDGET

| Budget Summary/Category | Project Total | Grant Funds Requested | Matching Funds |
|-------------------------------------------|-------------------|-----------------------|----------------|
| Personnel | | | |
| Travel | | | |
| Equipment | \$2,000.00 | \$2,000.00 | \$0.00 |
| Materials/Supplies | | | |
| Contractual Services | | | |
| Other | | | |
| Total (must match Detailed Budget) | \$2,000.00 | \$2,000.00 | |

| Source of Matching Funds (*): | Amount | 2010-2011 MAR 23 2010 2010-2011 |
|-------------------------------|--------|---------------------------------------|
| N/A | | |
| | | |
| | | |

IV PROJECT OBJECTIVES AND METHODS

Management Site Inventory *(Site Maps are Required)*

Project Location

County(s) (*): **Statewide** – This project will have direct impacts on the overall health and recovery of the State endangered Alligator Snapping Turtle. As part of the IDNR approved recovery plan for this species, animals will be released at strategic sites throughout southern Illinois in the future in order to facilitate long-term recovery within Illinois.

City(s): **Statewide**

Section: **Statewide** Township: **Statewide** Range: **Statewide**

Project Objectives

Identify the discrete activities of the project (*):

This project calls for the purchase of two (2) Pennington A-3, 20-Watt Solar Powered Aerators. These would be placed in the AST breeding pond and remain in continuous operation to benefit the overall health of the ASTs in this pond.

Ponds should have some sort of aeration and/or water movement occurring during winter. Turtles gain oxygen during winter from the water through their skin. If the oxygen levels in the water are too low, the turtle suffocates. It will come up a few times on warm days to breathe through its lungs but if the pond is mostly frozen, the turtle cannot surface. In addition to requiring high levels of oxygen in the water over winter, the turtle needs low levels of carbon dioxide, hydrogen sulfide, and methane. The carbon dioxide is expelled by all animals in the pond. The hydrogen sulfide and methane are released as plant material, dead animals, etc. decompose in the water. These gases must get out. An aeration pump to add oxygen and release the carbon dioxide, hydrogen sulfide, and methane is proper for the long term health of these animals year round, especially during the winter months when ice may form.

Project Methods

Describe in detail the methods and materials that will be used to achieve objectives (*):

This project calls for the purchase of two (2) Pennington A-3, 20-Watt Solar Powered Aerators. These would be placed in the AST breeding pond and remain in continuous operation to benefit the overall health of the ASTs in this pond.

Aeration uses the power of water, air or machinery to force both oxygen-depleted water and waste to the pond's surface, returning the water to a clean, healthy state. Pond aeration is beneficial year-round. Moving water prevents ice from forming over a pond's entire surface in winter, allowing a beneficial gas/oxygen exchange instead of leaving waste to rot until the ice melts in spring. Aeration's main objective is the prevention of algae growth. In abundant quantities, algae can be toxic, capable of harming plants and fish, as well as animals and humans.

Modern aeration systems use power sources such as electric, windmill and solar energy to power compressors and pumps. Linear, diaphragm, rotary vane, rocking piston and piston compressors deliver, in order, progressively stronger pressure for progressively deeper ponds. Shore-based compressors pump air through long hoses to bottom-mounted diffusers, eliminating the need for running electricity to a pond-based platform, where compressors were once located.

Permits (apply directly to the office involved) See Instructions to download applications – attach one (1) copy to application

Does your project involve:

Endangered/Threatened Species Collecting Species Nature Preserve IDNR Property

V EDUCATION PROJECT

N/A

Area of state: Statewide: Yes No If No, which counties: All

List the educational objectives: *(please be concise)*: N/A

What end-products will be produced/distributed? (ie: television segments, VHS videos, brochures, displays, radio programs, etc.)

None – this is an equipment purchase necessary for the long-term health, survival, and recovery of the Alligator Snapping Turtle in Illinois – as part of the IDNR approved recovery plan for this species. As recovery of this animal progresses, the IDNR will feature updates in Department publications such as “Outdoor Illinois” as well as radio and possible television segments.

VI DETAILED BUDGET (Required for all applications.)

PERSONNEL

| Name or Position Title | Hourly Rate | Hours | Total |
|------------------------|-------------|-------|-------|
| N/A | | | \$0 |
| | | | |
| | | | |

TRAVEL

| Position/Description | Item Rate | Quantity | Total |
|----------------------|-----------|----------|-------|
| N/A | | | |
| | | | |
| | | | |

EQUIPMENT (provided by applicant)

| Description | Price/Item | Quantity | Total |
|----------------------------------------------------------------|------------|----------|------------|
| *Purchase of two (2) 20 watt solar aerators | \$750.00 | 2 | \$1,500.00 |
| *Purchase of two(2) backup solar batteries with charging units | \$250.00 | 2 | \$500.00 |
| | | | |

MATERIALS/SUPPLIES

| Description | Price/Item | Quantity | Total |
|-------------|------------|----------|-------|
| N/A | | | |
| | | | |
| | | | |

CONTRACTUAL SERVICES

| Description | Total |
|-------------|-------|
| N/A | |
| | |
| | |

OTHER

| Description | Total |
|------------------------------|-------------------|
| N/A | \$0 |
| | |
| | |
| TOTAL COST OF PROJECT | |
| | \$2,000.00 |

VII ATTACHMENTS

- Detailed Proposal
 Project Site Map
 Permit Application
 Other _____

Mail one (1) original application (all pages) with supporting documentation to:

Illinois Department of Natural Resources
Office of Resource Conservation - Special Funds
One Natural Resources Way
Springfield, IL 62702-1271

APPLICATION DEADLINE: 5:00 p.m. APRIL 1st

Questions - Contact: specialfunds@dnrmail.state.il.us
or call (217) 782-2602

Equal opportunity to participate in programs of the Illinois Department of Natural Resources (IDNR) and those funded by the U.S. Fish and Wildlife Service and other agencies is available to all individuals regardless of race, sex, national origin, disability, age, religion or other non-merit factors. If you believe you have been discriminated against, contact the funding source's civil rights office and/or the Equal Employment Opportunity Officer, IDNR, One Natural Resources Way, Springfield, IL 62702-1271; (217) 785-0067; TTY (217) 782-9175.

idcar out of
for 1/11
one added to the
9/100 Dist. out 1/11

ACCOUNTING INFORMATION SYSTEM
AIS-13

DATE: 02/15/11

OPERATOR NAME: VINCE HILL

TYPE: DR

| FY | FUND | AGCY | DIV | LINE | SQ/TYP | SUBA | PROJ | FY | PROJ | DEPTC |
|------|------|------|-----|------|--------|------|------|------|------|-------|
| 2011 | 909 | 422 | 20 | 1900 | 0000 | 0000 | 2011 | 0020 | 3570 | |

CONTROL #: 0000022816 DOC: 1599 GOODS ACPT DATE: 12162010 AGE DAYS: 56

FEIN: 3713992346270201 1264/TYPE: V INVOICE RECPT DATE: 12212010

VENDOR INV #: 1365733 AMT: 1684.00 INV DATE: 12142010

REF DOC: _____ CONTRACT #: _____ BUREAU APPROVAL DATE: 02152011

OB: _____ EXPEND: _____ DESC 1: _____
CNTY/REP DIST: 000-000 DESC 2: _____

| CFDA: | CFDA: | CFDA: | CFDA: | CFDA: |
|---------|---------|---------|---------|---------|
| DOC: | DOC: | DOC: | DOC: | DOC: |
| AMOUNT: | AMOUNT: | AMOUNT: | AMOUNT: | AMOUNT: |

| DEPT: | DEPT: | DEPT: | DEPT: | DEPT: |
|---------|---------|---------|---------|---------|
| AMOUNT: | AMOUNT: | AMOUNT: | AMOUNT: | AMOUNT: |
| 3570 | | | | |
| 1684.00 | | | | |

SERVICE DATES: 12142010 THRU 12212010 GAAP CD: 5350 BILLING ACCT #: _____
REMITTANCE:

PURCHASE OF 2 SOLAR POWERED POND AERATORS FOR THE IDNR ALLIGATOR TURTLE BREEDIN
G POND LOCATED IN SPRINGFIELD "BOTH EXCEED \$ 100.00" WPF11-L14

VENDOR NAME: PENNINGTON EQUIPMENT COMPANY BEP: NONE
ADDRESS: 1520 N 6TH ST

CITY: SPRINGFIELD STATE: IL ZIP CODE: 62702 2622

| DESC: N | PROG: Y | C-02: N | C-14: N | A/R: N | C/A: N | JRNL: N |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| PROG: 3588 | PROG: _____ |
| AMOUNT: 1684.00 | AMOUNT: _____ |
| PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ |
| AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ |
| PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ |
| AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ |
| PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ |
| AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ |
| PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ | PROG: _____ |
| AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ | AMOUNT: _____ |

BUREAU AUTHORIZATION: _____

Handwritten mark

VENDOR PAYMENT

AIS CONTROL NUMBER:

22816

| FY | FUND | DIV | LINE | SQ/TYPE | SUBA |
|------|------|-----|------|---------|------|
| 2011 | 909 | 20 | 1900 | 0000 | 0000 |

FEIN: 37-1399234

DOC # Amount

1599 \$

_____ \$

_____ \$

_____ \$

_____ \$

GOODS ACCEPT DATE:

12/16/10

VENDOR INV#: 1365733

INVOICE RECEIPT DATE:

12/21/10

NAME: Pennington Equipment Company

INVOICE DATE:

12/14/10

AMOUNT: \$1,684.00

ADDRESS: 1520 North 6th Street

CITY: Springfield

STATE: IL ZIP: 62702

DNR #: _____

OBLIGATION #: _____

SERVICE DATES: 12/14/10 THRU 12/21/10

GAAP CODE: 5350

DESCRIPTION: (Include multiple invoice #'s and/or vendor account #'s)

This is an FY2011 Willdife Preservation Fund Project: WPF11-L14. This is for the purchase of 2 solar powered pond aerators for the IDNR alligator snapping turtle breeding pond located in Springfield, Illinois. ~~Program Code: #3588~~

| COST CENTER: | Number | Amount |
|--------------|-------------|-------------------|
| | <u>3570</u> | <u>\$1,684.00</u> |
| | _____ | _____ |
| | _____ | \$ |
| | _____ | \$ |
| | _____ | \$ |

PROGRAM CODE:

| Number | Amount |
|-------------|-------------------|
| <u>3588</u> | <u>\$1,684.00</u> |
| _____ | _____ |
| _____ | \$ |
| _____ | \$ |



RECEIVING OFFICER SIGNATURE: [Signature]

DATE: 12/21/10

HEAD OF UNIT SIGNATURE: [Signature]

DATE: 12/20/10

Reg. Posting #: _____

Site Posting #: _____



Pennington Equip Co

1520 N. 6th Street
Springfield, IL 62702

Invoice

Date 12/14/2010
Invoice # 1365733

Bill To

Illinois Dept. of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271

Ship To

Illinois Dept. of Natural Resources
Joseph Kath
One Natural Resources Way
Springfield, IL 62702-1271

| P.O. Number | Terms | Rep | Ship | Via | F.O.B. |
|--------------------|--------|-----|------------|-------|--------|
| JK-AST10-WPF11-... | Net 30 | hse | 12/14/2010 | FedEx | |

| Quantity | Item Code | Description | Price Each | Amount |
|----------|--------------------|-------------------------------------------------------------------|------------|----------|
| 2 | EKBS-10A Solar ... | 12 volt solar aerator with 20 watt panel and upgrade to 2nd pump. | 842.00 | 1,684.00 |

Received
DEC 21 2010
Division

Payments/Credits \$0.00 **Total** \$1,684.00

Thank you for your business.

Balance Due \$1,684.00

| Phone # | Fax # | E-mail | Web Site |
|--------------|--------------|------------------------------|-------------------------|
| 888-261-4726 | 866-422-0018 | help@PenningtonEquipment.com | PenningtonEquipment.com |

PURCHASE REQUEST



Illinois
Department of
Natural Resources

| | | | |
|------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Date: 11/09/2010 | | PURCHASE APPROVAL | |
| Division: Natural Heritage | | Requester is authorized to purchase per specifications, quantities and costs as listed below. Goods or services must be ordered by June 30 th of current fiscal year. | |
| Fiscal Year: 2011 | CDB # | Purchase Order #: JK-AST10-WPF11L14 | Signature |
| Reference Document # | | Date | |
| Appropriation: 909-42220-1900-0000 | | Procurement Business Case | |
| Sub-Account: 0000 | | Gov't. Office Approval (\$100,000.+) | |
| Detailed Object Code | | Type of Purchase: Equipment | |
| | | <input type="checkbox"/> Commodities <input checked="" type="checkbox"/> Equipment | |
| | | Equip. Rental (state terms) | |
| | | N/A | |
| | | Printing (attach specs and previous PO) | |
| | | Other | |

Only one contract per request
(Items on state contract must be listed by commodity No. and contract No.)

| Item No. | Item Name/Desc | Quantity | Unit Price | Tot. Cost |
|----------------|----------------------------|-----------------|-------------------|-------------------|
| EKBS10 | Solar Powered Pond Aerator | 2 | \$842.00 | \$1,684.00 |
| Shipping Costs | UPS Ground | 1 | \$9.76 | \$9.76 |
| | | | | |
| | | | | |
| | | | | |
| | | Total: 3 | \$1,693.76 | \$1,693.76 |

Attachments: Yes No Type Product Description and order form.

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Ship to: Joseph Kath, Endangered Species Manager Contact person: Division of Natural Heritage Address: Illinois Department of Natural Resources One Natural Resources Way - Spfld., IL. 62702-1271 Phone: 217/785-8764 Fax: 217/785-2438 | Bill to: Same as "Ship To" Contact. Contact person: Address: Phone: Fax: |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|

Justification/Trade-In Information Item purchase approved via Wildlife Preservation Fund Grant Agreement: #11-L14W

| | | | |
|-------------------------------------------------------------------|--|--------------------------------------------------------------------------|--|
| EDP Purchases: J-T Plan Project No. | | Liaison Approval | |
| Possible Vendor: (Name/Address) | | Requestor Information/Signatures | |
| Pennington Equipment Company | | Name of Area/Program: Endangered Species Program | |
| 1520 N. 6th Street, Spfld, IL. 62702 | | Location Code: #3570 Region: Springfield (0) | |
| | | Requested by: Joseph A. Kath - JAK Date: 11/09/2010 | |
| | | Supervisor Approval: Date: | |
| Contact person: Dick Pennington | | Date: | |
| Office phone: 888-261-4726 Fax: 888-422-0018 | | Division Approval: Date: 11/10/10 | |
| FEIN #: email: info@solaraerator.com | | Finance Officer: Chris Holbrook Date: 11/10/10 | |

JAK 11/10/10