**SOUTH DAKOTA ACADEMY OF SCIENCE**

*For the Promotion of Science Teaching, Research and Service*

# [***http://www.sdaos.org***](http://www.sdaos.org)

#  **CALL FOR PAPERS**

**101st Annual Meeting**

**April 8-9, 2016**

**University of Sioux Falls**

**Sioux Falls, SD**

The 101st Annual Meeting of the South Dakota Academy of Science will be held at the **Salsbury** **Science Center** at the **University of Sioux Falls**, **April 8-9, 2016.**

The Annual Meeting will open on Friday afternoon with symposia followed by the annual banquet. Contributed papers, and poster sessions are scheduled for Saturday. Papers and posters from South Dakota scientists and students in all areas of engineering, science and mathematics are welcome.

Currently a Fellows Symposium is being planned. The deadline for submission of other symposia, including titles, speakers, and contact persons, is **7 March 2016**.

Authors presenting papers and/or posters must submit their abstracts and *Proceedings Submission Form* **by March 7, 2016**. The author or one co-author must be a member of the South Dakota Academy of Science.

To pre-register, please download, complete and mail the *Pre-Registration Form* (see below). Early bird registration ends 15 March. For additional information, including membership, visit the SDAS Web Site at [**http://sdaos.org**](http://sdaos.org)

**Tentative Meeting Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
|   | Friday |   | Saturday |
| 11:00 am--5:00 pm | Registration | 8:00 am--Noon | Registration |
| 11:30 am--1:00 pm | Lunch | 8:00 am--9:30 am | Oral presentations |
| Noon--1:30 pm | Executive Committee | 8:00 am--9:30 am | Oral presentations |
| 1:30 pm --4:00 pm | Symposium I | 9:30 am--10:30 am |  Poster presentations/ judging |
| 1:30 pm --4:00 pm | Symposium II | 10:30 am--Noon  | Oral presentations |
| 4:30 pm -- 5:30 pm | Poster Session | Noon--1:30 pm | Luncheon and Business Meeting |
| 6:00 pm --6:45 pm | Mixer |  |   |
| 7:00 pm --7:45 pm | Banquet |  |   |
| 8:00 pm--9:00 pm | Keynote Address |   |   |

**Motel Accommodation**

**Home2Suites by Hilton** (2 blocks from campus) 20 rooms

Group web page address is: <http://home2suites.hilton.com/en/ht/groups/personalized/F/FSDMCHT-SDA-20160407/index.jhtml?WT.mc_id=POG>

|  |  |
| --- | --- |
| Group Name: | SD Academy of Science |
| Group Code: | SDA |
| Check-in: | 07April, 2016 |
| Check-out: | 09 April, 2016 |
| Hotel Name: | [Home2 Suites by Hilton Sioux Falls/ Sanford Medical Center, SD](http://home2suites.hilton.com/en/ht/hotels/index.jhtml?ctyhocn=FSDMCHT) |
| Hotel Address: | 1120 S. Grange Avenue |
|   | Sioux Falls, South Dakota 57105 |
| Phone:  | 605.332.5461 |
| Cost: | King--$105.00 per night |

 2 queen beds-- $114 per night

**La Quinta Inns & Suites** (mall) 20 rooms  275-4555 $84.00—group name SD Academy of Science

**Holiday Inn Express** (mall) 20 rooms  361-0122 $84.00—group name SD Academy of Science

**Staybridge Suites** (mall) 20 rooms  361-2298 $84.00—group name SD Academy of Science

For other motels and state rates see <http://www.state.sd.us/boa/staterates.htm>

**TO SUBMIT AN ABSTRACT (of a contributed paper or poster)**

1) Please use the Abstract Format Guidelines (below) to complete your abstract.

2) Send a completed *Proceedings Submission Form* (**in MS Word**) and your abstract (**in MS Word**) as attachments to an email to **rotatina@dwu.edu**. Do not send pdfs.

**Deadline for abstract submissions is March 7, 2016.**

#### ABSTRACT FORMAT GUIDELINES

TITLE OF PAPER: Brief and descriptive.

NAME, ADDRESS, AND AFFILIATION OF AUTHOR(S):

1. If there are multiple authors, designate the presenter with an ‘\*’. The corresponding author is the person to contact for questions, revisions, page charges, invoices, etc.

2. Indicate any undergraduate presenters with a ‘UG’ behind their name and an ‘\*’.

ABSTRACT:

1. Approximately 250 words or less, single-spaced.

2. Written for as general an audience as possible with a statement of purpose for the project and a brief description of methods and results.

3. An abstract is a report of research results; thus, it should be written in past tense.

**Example Abstract**

**The cost of capturing prey: measuring largemouth bass foraging activity using glycolytic enzymes (lactate dehydrogenase)**

**T. M. Selch\*and S. R. Chipps**

USGS South Dakota Cooperative Fish & Wildlife Research Unit

Department of Wildlife and Fisheries Sciences

South Dakota State University

Brookings, SD 57007

Corresponding author email: steve.chipps@sdstate.edu

ABSTRACT

# We used muscle-derived lactate dehydrogenase (LDH) to measure effects of prey size on anaerobic foraging activity by largemouth bass (*Micropterus salmoides*). Largemouth bass (240 to 303 mm total length, TL) were fed bluegill (*Lepomis macrochirus*) prey (33 to 85 mm TL) in laboratory feeding trials (760 L tanks). Prey selectivity experiments showed that small bluegills with a prey-to-predator length ratio (P:PR) < 0.20 were strongly preferred (> 85%) over larger (P:PR > 0.25) individuals. Largemouth bass activity, as indexed by LDH, increased with increasing bluegill length and was 24% higher in bass feeding on large (P:PR = 0.30) compared to small (P:PR = 0.13) prey. Moreover, bioenergetics modeling revealed that food consumption was appreciably underestimated (29 to 33%) for largemouth bass foraging on large bluegills (P:PR = 0.25 and 0.30), implying that activity costs vary with prey size, consistent with LDH measurements. These findings highlight the importance of prey size on foraging costs by piscivores and the difficulties of accounting for activity level in bioenergetics models.

# *Proceedings Submission Form*

Please complete one form for EACH submission and email it as an attachment to **rotatina@dwu.edu**.

|  |  |
| --- | --- |
| Abstract Title: |  |
| Authors (please indicate presenter with an \*, UG for undergraduates): |  |
| Corresponding Author:(i.e., contact person) |  |
| Affiliation:Mailing Address: |  |
| Phone number:Email:Advisor’s Email: |  |

I/We plan to **present** (underline one): ORAL PRESENTATION POSTER (36” x 48”)

Undergraduate student posters may be entered into the AAAS Poster Presentation Judging. The two best poster presenters are awarded a one-year subscription to *Science*.

Do you wish to have your poster judged as part of the **AAAS Poster Presentation Judging**? YES NO

Undergraduate and graduate student oral presentations may be entered into the Oral Presentation Judging. Monetary awards will be given to the top three oral presentations.

Do you wish to have your presentation judged as part of the **Oral Presentation Judging**? YES NO

\*Do you wish to have this presentation included in a **Symposium**? YES NO

What is the symposium topic? Who will be in charge?

\*Do you wish to have this presentation included in the **SDAS Fellows Symposium**? YES NO

\* The local arrangements committee and the *Proceedings* editor will decide on acceptability of contributed papers. Subsequently, authors will be notified of acceptance. Symposium presenters must register for the meeting ($60 registration fee includes lunch and snacks) and are encouraged to become members of the Academy.

I/We plan to **publish** (underline one): TITLE ONLY ABSTRACT ONLY FULL PAPER

 If you plan to **publish** a full paper in the *Proceedings*, please follow the *Instructions for Authors* available at **http://sdaos.org.** **The deadline for submission of full papers is July 15, 2016**. Page charges will be $20- $25 per page, based on the number of pages in the final, galley proof.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Pre-Registration Form**

**2016 South Dakota Academy of Science** **Annual Meeting**

**April 8-9, University of Sioux Falls**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Institution/Agency \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Department or Area\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mailing Address\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

City \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ State \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Zip \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Telephone (business) (\_\_\_\_)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ E-mail\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Renewing Member ( ) New Member ( )

Please select (circle) membership category and $$ amounts below:

**Note: Fellows of the South Dakota Academy of Science are Life Members and Guests of the Academy. We request that Life Members fill out a registration form for the purposes of providing the host with counts for accommodations, meals, and the banquet.**

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| --- |
| **Early Bird registration:15 March deadline** |
|  | **Members** | **High School teachers, Students** |
| **Membership dues** | $25 | $10 |
| **Meeting Registration\*** | $60 | $10 |
| **\***Includes Fri. & Sat. light breakfast, breaks & lunch |  |  |
| **Banquet (Friday, April 8)** | $25 | $25 |
|  |  |  |
| **Total** | $\_\_\_\_\_\_ | $\_\_\_\_\_\_ |
| **After 15 March 2016 and Onsite Registration** |
|  | **Members** | **High School teachers, Students** |
| **Membership dues** | $25 | $10 |
| **Meeting registration**\* | $90 | $10 |
| \*Includes Fri. & Sat. light breakfast, snacks & lunch |  |  |
| **Banquet (Friday, April 8)** | $35 | $25 |
|  |  |  |
| **Total** | $\_\_\_\_\_\_ | $\_\_\_\_\_\_ |

# TOTAL AMOUNT ENCLOSED………………………$\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Paid: by Cash \_\_\_\_\_\_\_\_\_ by Check \_\_\_\_\_\_\_\_\_\_ Check No. \_\_\_\_\_\_\_\_\_ Rcd by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Forms received without accompanying payment will not be eligible for early bird discounts**

**To pre-register, send Pre-registration form and payment by US mail to:**

Dr. Jeff Palmer, Treasurer, South Dakota Academy of Science

College of Arts and Sciences-SC

Dakota State University, 820 N. Washington Ave.

Madison SD 57042