

**SOUTH DAKOTA ACADEMY OF SCIENCE**  
*For the Promotion of Science Teaching, Research and Service*

**CALL FOR PAPERS**

**2010 MEETING**

95<sup>th</sup> Annual Meeting

April 9-10

Spearfish Holiday Inn and Convention Center,  
Spearfish, SD

The 95<sup>th</sup> annual meeting of the South Dakota Academy of Science will be held at Spearfish Holiday Inn and Convention Center, and hosted by **Black Hills State University on April 9-10, 2010.**

The annual meeting will open with a Symposium on underground science at the Sanford Underground Laboratory at Homestake on Friday afternoon. Following the symposium will be a keynote address by Dr. Kara Keeter (BHSU, SUSEL) entitled “Particle Physics Research and Outreach at DUSEL.” On Friday evening, the plenary address on bioinformatics will be given by Carol Lushbough (USD).

Contributed papers and a poster session are scheduled for Saturday, April 10. Papers and posters from South Dakota scientists and students in all areas of science and mathematics are welcome. Authors presenting papers and/or posters need to submit their abstracts and *Proceedings Submission Form* **by March, 1, 2010.** The author or one co-author must be a member of the South Dakota Academy of Science. To pre-register, please complete and mail the attached *Pre-Registration Form*. For additional information, including membership, visit the SDAS Web Site at <http://acadsci.sdstate.org/>.

**Tentative Program Schedule-at-a-Glance**

<b>Friday, April 9, 2009</b>		<b>Saturday, April 10, 2009</b>	
11:00am – 5:00pm	Registration	7:00am - Noon	Registration
1:00pm – 3:00pm	Symposium: Year of Science	8:00am - 10:00am	Contributed papers
3:00pm - 3:30pm	Break	10:00am -Noon	Poster session
3:30pm – 5:00pm	Symposium (continued)	Noon	Luncheon
5:00pm – 6:00pm	Keynote Address	1:00pm – 2:00pm	Business meeting
6:00pm – 8:00pm	Banquet	2:00 pm – 5:00pm	Contributed papers
8:00pm	Plenary Address		

**Motel Accommodations**

Best Western 642-7795

Black Hills Lodge 642-7101

Days Inn 642-7101

Comfort Suites 642-3003

Holiday Inn Hotel and Convention Center 642-4683

(A block of 50 rooms are reserved on April 8, 75 on April 9, and 50 on April 10, state rates are available )

Howard Johnson Inn 642-8105

Quality Inn 642-2337

Rhodeway Inn and Suites 642-2350

Super 8 642-4721

Travelodge 642-4676

**TO SUBMIT AN ABSTRACT (Contributed paper and/or Poster) DUE MARCH 1:**

- 1) Please use the *Abstract Format Guidelines* (below) to complete your abstract.
- 2) Submit a *Proceedings Submission Form* and your abstract as follows:

**Electronic submission (Preferred):** Submit a completed copy of the *Proceedings Submission Form* along with a copy (MS Word) of your abstract and send it to rotatina@dwu.edu.

OR

**Mail submission:** Submit a completed *Proceedings Submission Form* along with one hard copy and one electronic copy (3.5" diskette or CD) of your abstract (in MS Word) to:

Robert Tatina  
704 South Montana  
Mitchell, SD 57301  
rotatina@dwu.edu  
605-996-7670

**Please submit materials either electronically OR by mail (as above); DO NOT send both. Electronic submissions as email attachments in MS Word are preferred.**

**Deadline for abstract submissions is March 1, 2010.**

**ABSTRACT FORMAT GUIDELINES**

TITLE OF PAPER: Brief, descriptive title of your presentation.

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

1. If there are multiple authors, designate the presenter with an '\*'. Underline the name of the corresponding author (i.e., person to contact for questions, page charges, etc...).
2. Indicate any undergraduate presenters with a 'UG' behind their name and an '\*'.

ABSTRACT:

1. Approximately 250 words or less. Double-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)

Selch, T.M.\*, 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

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.

Abstract Title:	
Authors (please indicate presenter with an *, UG for undergraduates):	
<u>Corresponding Author:</u> (i.e., contact person)	
Affiliation: Mailing Address:	
Phone number: Email: Advisor's Email:	

I/We plan to **present** (underline one):      ORAL PRESENTATION      POSTER

Is this presentation part of the Underground Science Symposium(underline one):    YES                      NO

Note: Symposium presenters must register for the symposium (\$50 registration fee) and are encouraged to become members of the Academy).

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

- If you plan to **publish** a full paper in the *Proceedings*, please follow the *Instructions for Authors* available at <http://acadsci.sdstate.org/>. The deadline for submission of full papers is July 15, 2010.

Page charges will be \$30 per page, based on the number of pages in the final, galley proof.

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

**Pre-Registration Form**  
**2010 South Dakota Academy of Science Annual Meeting**  
**Spearfish Holiday Inn and Convention Center**  
**Spearfish, South Dakota**

Name \_\_\_\_\_

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

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

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

Telephone (business) (\_\_\_\_) \_\_\_\_\_ Telephone (home) (\_\_\_\_) \_\_\_\_\_

E-mail \_\_\_\_\_ Fax \_\_\_\_\_

I have been a member during the following years: \_\_\_\_\_

I am a new member \_\_\_\_\_

2009 Proceedings preference (Circle one): Paper Copy    Electronic Copy

Please select (circle) choices below:

	<b>Members</b>	<b>Non-members</b>	<b>Students</b>
<b>Membership dues*</b>	\$25	--	\$10
<b>Meeting registration</b>	\$30	\$50	\$15
<b>Banquet (Friday, April 3)</b>	\$20	\$20	\$20
<b>Lunch (Saturday, April 4)</b>	\$12	\$12	\$12
<b>Symposium (Friday, April 3)</b>	--	\$50	--
<b>Total</b>			

\* Includes subscription to *Proceedings of the South Dakota Academy of Science*.

TOTAL AMOUNT ENCLOSED.....\$\_\_\_\_\_

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

Received by: \_\_\_\_\_

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

Pat Tille, Ph.D.  
Treasurer, South Dakota Academy of Science  
Program Director Clinical Laboratory Science  
South Dakota State University  
SH117, Box 2202  
Brookings SD 57006