

# NEWSLETTER

## Kansas Association of Biology Teachers

Volume 40 Number 1 - February 1999

### Calendar & Activities

Please mail, e-mail or phone meeting dates and other items of interest to biology teachers to John Wachholz, 2311 Applewood Lane, Salina, Kansas 67401-

Date	Event
May 15, 1999.....	Spring Field Trip - Canoe Trip on KS River or Stream
May 21-23, 1999.....	Kansas Herpetological Society Spring Field Trip, Kanopolis
September 18, 1999.....	Sternberg Museum and Wildcat Canyon – Hays
October 1-3, 1999 .....	Kansas Herpetological Society Fall Field Trip, Cherokee County, Kansas
October 27-30, 1999.....	NABT National Convention - Fort Worth, Texas
March 25–28, 1999 .....	NSTA National Convention - Boston
September 16, 2000.....	Fall Meeting – Great Plains Nature Center, Wichita
May 13, 2000.....	Morton County Field Trip
Spring 2001 .....	Northeast KS Field Trip



Your membership **expiration date** can be found on your mailing label. All dues are now payable on September 1st of each year. If an envelope was enclosed with your newsletter your membership has expired. Please use the envelope to mail your dues and the other information requested. The membership list was last updated on **February 28, 1999**. If you sent dues in after this date they were not recorded before the mailing list was printed.

### KABT Web Site Is Moving! <http://kabt.org>

This site will be up soon. The old site will direct you to the new site.  
Old Site is: <http://www.midkan.com/kabt/>

Send comments to:  
[jwachholz@midkan.net](mailto:jwachholz@midkan.net)  
NABT Web Site  
<http://www.nabt.org>



Printed On Recycled Paper



## Publishing Dates For Newsletter

The newsletter is published during the months of September, November, February and April. Manuscripts must reach the editor by the 15th day of the previous month. The KABT Newsletter includes abbreviated minutes of the official meetings, announcements of future activities, brief news notes, and other brief items of interest to biology teachers. Send your contributions to John Wachholz, Editor, 2311 Applewood Lane, Salina, KS 67401 785-825-7742. You may send you information to [jwachholz@midkan.net](mailto:jwachholz@midkan.net).

## Newsletter & Journal Articles

Articles are needed for the newsletter and journal. Send them via e-mail to [jwachholz@midkan.net](mailto:jwachholz@midkan.net) or on a disk. If you send it on a disk, any format is acceptable. Your help is appreciated.

Articles for the Kansas Biology Teacher should be sent to John Richard Schrock, editor KBT, Division of Biological Sciences, Box 50, Emporia State University, Emporia, KS 66801-5087. E-mail: [ksnaturl@esumail.emporia.edu](mailto:ksnaturl@esumail.emporia.edu)

Please remember to keep your dues up to date so you will continue to receive KABT publications.

## Outstanding Biology Student Certificates

These are available for students who you feel have completed a biology course under you and have shown outstanding achievement. We have just updated our supply. Send your name and address to KABT Student Certificates, 2311 Applewood Lane, Salina, KS 67401-3707.

Please use these certificates as valuable awards for outstanding students.

## NABT Contact Information

**Address:** ..... 11250 Roger Bacon Drive #19  
Reston, VA 22090-5202

**Web Site:**..... <http://www.nabt.org>

**Phones:** ..... 703-471-1134; 800-406-0775

**Fax:** ..... 703-435-5582

**E-mail:** ..... [NABTer@aol.com](mailto:NABTer@aol.com)

## KABT Spring Field Trip

The spring KABT field trip will be Saturday, May 15. Plans are to canoe on the Fall river southeast from Eureka. The float will take 4-5 hours so will be our major undertaking. The KDWP maintains a natural area along the river so we should be able to make periodic stops to investigate. I haven't made this float but my family has volunteered to make the trip with me before May 15 so that I can act like I know the area. I'm counting on all the collective expertise that always shows up to help in the sharing. I will scout out other local attractions for those camping Friday night.

As per our typical trips, people arriving Friday night can camp. I am told there is a park in Eureka which allows camping. I do know there is at least one nice motel for those not wishing to camp.

I'll plan some sort of morning activity before we launch so that those driving in that morning don't miss the float. What I do need is an RSVP on who will be coming and whether you need

to rent a canoe or have your own. Rental is possible in Eureka at around \$25 per canoe (two people).

More details will be forthcoming. I will mail details to anyone who RSVP's. If we have a large turn-out, it will be hard to accommodate late registrants. Eureka has only 12 canoes. Reservations will be made on a first come/first served basis.

RSVP (that means you contact me and let me know you are coming - Martha Stewart says people don't know that acronym anymore.)

RSVP to Harry McDonald, 11917 W. 143rd, Olathe, KS 66062, Home 913-897-9630, school 913-681-4200, email [<biologycctrack@hotmail.com>](mailto:biologycctrack@hotmail.com)

## From the President

Well, this probably finds you at the beginning of a new semester and maybe even some new classes to teach. If your school is like mine - we celebrate this changing of the semester by passing around the kids who have failed first semester to each other! Sometimes this is good and sometimes, well, you know how that goes! Actually, I am writing this article right now amidst grading hugh stacks of fruit fly lab reports and wondering, why do I have them do this assignment at the END of first semester, leaving me only a week to grade over one hundred detailed lab reports. But. . . I do what I know is important for my students to develop good science reporting and writing skills. And that happens to leave me under a big stack of papers. But, alas, the lab reports have been pretty good this year. I decided to not \*tell\* them everything about the fruit flies we used, such as, what traits were dominant or recessive--and my students had to determine that experimentally. That really seemed to solidify that in their understanding about genes and their behavior from generation to generation.

In November, I attended the NABT Conference in Reno, Nevada. It was a wonderful time to learn new things about biology and to get updates as well as being in a beautiful part of the country (but I learned that it snows really quick in the Sierra Mountains and the roads get icy coming out of the mountains--which makes for a scary ride!!). I participated in several workshops that involved PCR techniques, protein electrophoresis, and growing glow-in-dark bacteria (which I took home, of course!!). I also attended numerous sessions where I learned some great new lab ideas or extensions of labs that I already do! If you ever have the opportunity to go to a conference--DO IT! What a great uplifting feeling it is to \*hang out\* with some other biology teachers!

I was pleased to see a nice constituency from Kansas. We really had some good representation from our state in the secondary and two- and four-year college sections this year. I tried at this conference to become involved with problems facing our national organization - which are similar to our own. The main problem(?) in NABT is a low number of members. We discussed at some length in a small focus group, why more biology teachers in our nation do not belong to a national (or state) professional biology education organization? The organization is also concerned with it is finances, providing the same benefits for a smaller membership, without raising the costs to join each year.

I think that I feel the same frustration for our state organization. Do Kansas biology teachers WANT to join our organiza-



tion? Do they feel like they benefit from the meetings, newsletters, and the annual journal enough to keep paying their dues every year? Can we as KABT officers offer biology teachers in Kansas more meetings, conferences, idea-sharing workshops? The KABT Board officers have a winter board meeting scheduled for February 13th. We will be discussing some of these issues that face our organization and how we are going to solve them. I think that your input and ideas are very valuable to the board and could be appropriately channeled through your region representative or sent to an executive officer for the board to discuss for future possibilities. In other words, KABT should work for all Kansas Biology teachers - but it really takes a combined effort to do that. Everyone is welcome to submit ideas and articles to John Wachholz, our newsletter editor. It also takes a good financial base to be able to mail out these newsletters - -and that's what your dues are used for. Look at your mailing label; if your expiration date has past for paying dues, try to get caught up when you can. If you have colleagues that don't belong to KABT, encourage them to join--it really is important for the survival and success of our state level professional organization! See you at the spring field trip!

### **Information from the High Schools That Work Assessment**

I recently attended the SREB (Southern Regional Education Board) Winter Retreat held in San Antonio, Texas, Jan 21 -23, 1999. The workshop focused around three main areas of achievement: mathematics, reading, and science. SREB leaders gave results of nationwide assessment testing. The results for mathematics and reading were above average, while the science results reported approximately 54% of the students at the testing sites had mastered the science objectives. Several speakers gave suggestions on improvements that I thought I would share with Kansas teachers. One speaker, John Porter, the director of School-to-Career at the National Center on Education and the Economy in Washington, D.C., suggested five areas that schools should look towards in order for schools to change and to promote high school student performance levels. They are as follows:

1. Public engagement
2. Standards and assessments
3. Learning environments
4. Community services and support systems
5. High performance management

Several ideas come out of these basic guidelines. The first was double dosing, or to have two math classes and two language arts classes for students early in their high school career. These two courses would provide two different teachers for each discipline, so that the student could learn from two different points of view. Another idea was in promote literacy in the high school student by doing cross-age teaching, having an older student work with a younger student with a reading grade level that is one year under that of the older students reading level. It was also suggested that all students should be reading at least ten books every year. It was stressed that all standards should be the same for all students.

Another speaker, Sanford Gilmore, director of Community Mobilization at The Efficacy Institute in Lexington, Mass., put forth several newly proposed benchmarks that schools will need

to consider in the near future in order to stay competitive with schools in other countries. He stressed that development requires our schools to commit to an effective effort, a continuous improvement toward targeted learning outcomes, strategy formulation and effective collaboration amongst school administration and teachers. Their proposal for new 21st century standards of development include:

1. A demonstration of mastery in calculus or an equivalent.
2. A demonstration of mastery in speaking, listening, reading and writing a second language.
3. A demonstration of mastery of written and spoken expression of the English language by writing, presenting and defending a literate, well-researched essay of 25 pages.
4. A demonstration in behavior and interaction, the capacity to live by high ethical standards.
5. A demonstration of creative self expression through the arts.
6. A demonstration of the capacity to maintain good health and physical fitness.

I wondered at the time (and still do) about the need for science in a proposal for the 21st century set of standards! They also proposed methods that teachers would have to follow to achieve these standards. Teachers, to activate effective effort in students, will have to have tenacious engagement with their subject and with their students. They will also have to put forth an intense effort on feedback to the student and on an ongoing strategy formulation--always trying new ways to improve our methods of teaching. He mentioned that the popular game, Play Station, had done all of these things for those interested in playing it--and it keeps those people wanting more, higher levels, etc. He stresses that setting higher standards will accelerate all students to that target and by grouping by ability and other techniques which separate students will only debilitate those students even more.

Current statistics in Science achievement was presented by Gene Bottoms, senior vice-president of SREB. It was rather dismal compared to other statistics that we heard about at the conference. Suggestions were to set high standards and get students to meet them and to have students complete a challenging program of study consisting of an upgraded academic core and a major. To do this they suggest that science teachers have their students read, write, and present information; do hands-on laboratory experiences with frequent inquiry-based lab projects (I hope we are all doing this right now!), to teach at a college preparatory level, even for the career bound student, and to use cooperative learning techniques with students. They also suggested that we should show students what papers, projects look like that will earn an A. At least these ideas give us food for thought and perhaps a goal that we as biology teachers can work towards.

Lisa Volland

## BIOLOGY LAB PRACTICAL THE SCAVENGER HUNT

A great way to end a semester of studying the different kingdoms is to have a scavenger hunt! This hands-on lab practical exam will allow students to take their knowledge of the various types of plants, fungi, and animals into the field. In my regular and honors biology, mostly made up of freshmen and sophomores, we study the diversity of organisms by doing lab or field observations of living specimens during the last part of the second semester. If it is sometimes difficult to get outside in the spring because of location, transportation, weather, or otherwise--bring the outdoors inside with samples of wildflowers, mosses, leaves, earthworms and other small invertebrates and vertebrates. Practice conservation by collecting only what you intend to use. Return living specimens to their habitat whenever possible.

Below is a modified scavenger hunt appropriate for eastern Kansas. This originated with John Wachholz, Salina Central, and Ernie Brown, WaKeeney, fellow KABT members. Some of the following items we have looked at in class, others not, but they must decide on where to go look for the specimen and how to collect it. I have added to this list and taken other items away as some choices are either too easy or too difficult to collect.

I have my students take this list two weeks before the end of school. They may begin checking in the next morning or after school. I stop answering questions about the project after I make sure that all the directions are understood. As the students check in their items, I initial the circle, then throw away the item, or if it is an animal, the student has to decide where to put it in my room and how to keep it alive. We feed the live insects and fruit to the classroom animals

We have a seminar period built into our block schedule twice a week, so I allow those that missed checking in that morning to check in during this period. Most students are able to finish this lab practical on time, and with excellent scores. The total points assigned to this final is 15% of the semester grade points.

### BIOLOGY SCAVENGER HUNT

Each of the items listed below will earn you two (2) percentage points - up to a maximum of 100 percentage points (100%) for your final grade. Up to twenty five (25) additional items may be turned in after 100% is reached. These items will count for one (1) percentage point for a total of 25% in extra credit.

The following rules apply to the Scavenger Hunt and should be followed throughout the collecting:

Please take care in not DESTROYING any habitats as you collect.

Follow the 6 by 6 rule -- there should be at least 6 other plants or plant parts within 6 feet of the plant you are collecting.

Collect specimens carefully and place them into sacks or baggies and label with the appropriate name. Animals may bite! Wear gloves; when in doubt-leave it alone! Plants that have red spots or red areas on the stem or leaf may be poisonous-DO NOT TOUCH!

Practice conservation, label items separately and store in a central bag whenever possible.

You may work with your friends, lab partners, parents or siblings, but you'll have to do your research beforehand -- use your book, classroom references or library references to determine the specimen (plant/animal) and where to find it!

All items can be checked in before and after school or during seminar. We will go in order of arrival -- those people that wait but don't get checked in, may put their name on the board and be first for the next check-in period. These names will be erased daily.

All animals must be brought in alive - and maintained in the classroom for the duration of the project. Insects will be feed to the animals.

This sheet must NOT BE LOST!! This is your only copy - or you will have to start over again. SUGGESTION: Paperclip it somewhere safe!!

Your Scavenger Hunt ends at the end of the period on finals day.

Get started right away and have FUN!!

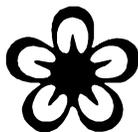
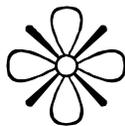
- 
- \_\_\_ Achene
  - \_\_\_ Acorn
  - \_\_\_ Aggregate fruit
  - \_\_\_ Algae
  - \_\_\_ Amniotic egg
  - \_\_\_ Amphibian adult
  - \_\_\_ Amphibian larva
  - \_\_\_ Animal skull, without muscle tissue
  - \_\_\_ Annual plant
  - \_\_\_ Ants
  - \_\_\_ Ant lion (in a sandy area)
  - \_\_\_ Aphid
  - \_\_\_ Arachnid
  - \_\_\_ Autotroph
  - \_\_\_ Beetle
  - \_\_\_ Bivalve shell
  - \_\_\_ Black walnut leaves
  - \_\_\_ Bracket fungi
  - \_\_\_ Bract
  - \_\_\_ Branch with alternate budding
  - \_\_\_ Branch with opposite budding
  - \_\_\_ Branch with whorled leaves
  - \_\_\_ Bulb
  - \_\_\_ Carnivore
  - \_\_\_ Carpetweed plant (watch out - it'll stick to you!)
  - \_\_\_ Cast of identified animal track (use Plaster of Paris??)
  - \_\_\_ Caterpillar
  - \_\_\_ Catkin
  - \_\_\_ Cattail plant (leaves, spikes)
  - \_\_\_ Cedar apple rust
  - \_\_\_ Cedar fruit
  - \_\_\_ Cedar leaf
  - \_\_\_ Chrysalis
  - \_\_\_ Cicada or locust
  - \_\_\_ Clam, freshwater, whole organism
  - \_\_\_ Clavicle of a chicken
  - \_\_\_ Cockroach
  - \_\_\_ Complete flower
  - \_\_\_ Composite flower
  - \_\_\_ Consumer
  - \_\_\_ Corm
  - \_\_\_ Cottonwood leaf
  - \_\_\_ Cotyledon
  - \_\_\_ Crayfish



- \_\_\_ Cricket
- \_\_\_ Crustacean
- \_\_\_ Curly dock plant
- \_\_\_ Dicot flower
- \_\_\_ Dioecious plant
- \_\_\_ Dogwood leaf
- \_\_\_ Down feather
- \_\_\_ Drupe
- \_\_\_ Dry flower heads of the wild
- \_\_\_ Duckweed
- \_\_\_ Earthworm
- \_\_\_ Ectothermic animal
- \_\_\_ Elm fruit
- \_\_\_ Elm leaf
- \_\_\_ Fiddlehead
- \_\_\_ Femur of a chicken
- \_\_\_ Flannel mullein leaf
- \_\_\_ Flea
- \_\_\_ Flight feather
- \_\_\_ Flower containing anthocyanin
- \_\_\_ Flower containing xanthophyll
- \_\_\_ Flower with a solitary inflorescence
- \_\_\_ Flower pollinated by insect
- \_\_\_ Flower pollinated by wind or gravity
- \_\_\_ Flower representative of the grasses
- \_\_\_ Follicle
- \_\_\_ Fossil found in Kansas
- \_\_\_ Four leaf clover
- \_\_\_ Frond
- \_\_\_ Furculum of the chicken
- \_\_\_ Garlic mustard flower
- \_\_\_ Ginkgo leaf
- \_\_\_ Grasshopper
- \_\_\_ Grub
- \_\_\_ Hackberry leaf
- \_\_\_ Henbit
- \_\_\_ Herbivore
- \_\_\_ Heterotroph
- \_\_\_ Horsetail or *Equisetum*
- \_\_\_ Honey locust leaf
- \_\_\_ Humerous of a chicken
- \_\_\_ Imperfect flower
- \_\_\_ Incomplete flower
- \_\_\_ Insect exoskeleton
- \_\_\_ Insect gall
- \_\_\_ Insect with one pair of wings
- \_\_\_ Insect with no wings
- \_\_\_ Insect with two pairs of wings
- \_\_\_ Ladybug
- \_\_\_ Leaf scar
- \_\_\_ Leaf with a dentate margin
- \_\_\_ Leaf with doubly serrate margin
- \_\_\_ Leaf with an entire leaf margin
- \_\_\_ Leaf with an incised margin
- \_\_\_ Leaf with palmate venation
- \_\_\_ Leaf with parallel venation
- \_\_\_ Leaf with pinnate venation
- \_\_\_ Leaf with serrate margin
- \_\_\_ Leaves from the Plantain plant



Teasel



- \_\_\_ Leech
- \_\_\_ Lenticel
- \_\_\_ Lichen
- \_\_\_ Littleleaf buttercup flower
- \_\_\_ Maggot
- \_\_\_ Maple fruit
- \_\_\_ Modified leaf example (be able to name)
- \_\_\_ Mold
- \_\_\_ Monocot flower
- \_\_\_ Mosquito
- \_\_\_ Moss
- \_\_\_ Mulberry (red or white) leaf
- \_\_\_ Mushroom
- \_\_\_ Oak leaf (pin, white)
- \_\_\_ Oak leaf (bur)
- \_\_\_ Owl pellet - do not handle or tear



apart

- \_\_\_ Palmately compound leaf
- \_\_\_ Phlox flower
- \_\_\_ Pine cone (ovulate)
- \_\_\_ Pine cone (pollen)
- \_\_\_ Pine leaf
- \_\_\_ Pinnately compound leaf (once)
- \_\_\_ Pinnately compound leaf (twice)
- \_\_\_ Planaria
- \_\_\_ Plant representative of the carnation (pink) family
- \_\_\_ Plant representative of the legume family
- \_\_\_ Plant representative of the lily family
- \_\_\_ Plant representative of the mustard family
- \_\_\_ Plant representative of the mint family
- \_\_\_ Plant representative of the rose family
- \_\_\_ Plant which reproduces vegetatively
- \_\_\_ Plant with a diffuse root
- \_\_\_ Plant with a tap root
- \_\_\_ Pod
- \_\_\_ Pome
- \_\_\_ Predator
- \_\_\_ Prey
- \_\_\_ Producer
- \_\_\_ Product made from recycled materials
- \_\_\_ Puffball
- \_\_\_ Purple Rocket flower
- \_\_\_ Recyclable item
- \_\_\_ Red clover
- \_\_\_ Redbud leaf
- \_\_\_ Representative of the Class Aves
- \_\_\_ Representative of the Class Osteichthyes
- \_\_\_ Representative of the Class Reptilia
- \_\_\_ Representative of the Order Coleoptera
- \_\_\_ Representative of the Order Diptera
- \_\_\_ Representative of the Order Hymenoptera
- \_\_\_ Representative of the Order Lepidoptera
- \_\_\_ Representative of the Order Orthoptera
- \_\_\_ Representative of the Phylum Annelida
- \_\_\_ Representative of the Phylum Arthropoda
- \_\_\_ Representative of the Phylum Echinodermata
- \_\_\_ Rhizome



- \_\_\_ Salamander
- \_\_\_ Samara
- \_\_\_ Scavenger
- \_\_\_ Seed dispersed by animals
- \_\_\_ Seed dispersed by wind
- \_\_\_ Sepals on a flower
- \_\_\_ Shepard's purse mustard
- \_\_\_ Silver maple leaf
- \_\_\_ Simple leaf
- \_\_\_ Slug
- \_\_\_ Snail
- \_\_\_ Snake skin (molted)
- \_\_\_ Sowbug
- \_\_\_ Spider web
- \_\_\_ Star of Bethlehem flower
- \_\_\_ Stem or branch with thorns
- \_\_\_ Stone fruit
- \_\_\_ Succulent leaves
- \_\_\_ Sugar maple leaf
- \_\_\_ Sycamore fruit/flowers
- \_\_\_ Sycamore leaf
- \_\_\_ Thistle (musk)
- \_\_\_ Tick
- \_\_\_ Tuber
- \_\_\_ White clover
- \_\_\_ Wild indigo flower
- \_\_\_ Wild violet flower
- \_\_\_ Willow leaves
- \_\_\_ Wood sorrel plant
- \_\_\_ Univalve shell
- \_\_\_ XS of stem showing annual rings
- \_\_\_ XS of stem showing heartwood and sapwood



Cumulative score: DATE: \_\_\_\_\_

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

FINAL PERCENTAGE \_\_\_\_\_  
 X TOTAL POINTS POSSIBLE \_\_\_\_\_

-----  
 FINAL SCORE/GRADE \_\_\_\_\_

Lisa Volland

### Legislative Note

A bill titled the "Conservation Investment Act" is up before the federal congress this year. This act is designed like the Pittman/Robertson and Johnson/Dingell Acts that provide funding for the conservation of game animals and the like. To fund this new Act new taxes would not be imposed.

Instead, monies would be drawn from existing taxes acquired from off-shore oil drilling.

This bill could drastically increase funding for land, water, and

non-game conservation, as well as wildlife education in the United States.

Specifically, budgets currently ranging from \$10,000 to \$100,000 are projected to increase to a total of an estimated \$10 million, in the state of Kansas (\$4-5 Million for land and water conservation, and \$4-5 million for wildlife conservation and education).

Please contact your federal house representative or senator to express your support for this important conservation bill. For full text versions of the bills in their current forms, access the congressional search engine at "<http://thomas.loc.gov/>" and search for the senate bill "S. 25" and/or the house bill "H. R. 701".

## KOS SPRING MEETING

APRIL 30 – MAY 2, 1999

### IN COWLEY AND SUMNER COUNTIES

This spring's Kansas Ornithological meeting will be held in Cowley and Sumner Counties from 30 April – 2 May 1999. This is graduation week at Southwestern College so make your hotel reservations early. The following motels are available in Winfield:

Quail Ridge Comfort Inn – 316-221-7529 (new)

Sonner Motor Inn – 316-221-4400

Town House Motel – 316-221-2110

Camelot Motor Inn – 316-221-9050

Motel 6 or 8 – brand new should be completed by the meeting, no phone number available at this time.

Arkansas City, 11 miles south of Winfield, has several hotels available as well. Camping is available at Winfield City Lake, 7 miles northeast of Winfield. You can call 316-221-5635 for cost and details of camping at the lake.



Friday night, 30 April, there will be a shorebird workshop at the Beech Science Center, Southwestern College, Winfield. The workshop will start at 8:00 p.m. and will consist of identification hints for Kansas's shorebirds, with additional clues to help ID some of the other more exotic North American shorebirds. Specimens from the Natural History Museum will also be used, including a series of skins of Short-billed and Long-billed Dowitchers, Western and Semipalmated Sandpipers, and more. There will also be a display of Ruddy Turnstones demonstrating how brightness in the plumage changes with age. Culminating the workshop will be a shorebird identification quiz on shorebirds of North America.

Saturday field trips will be taken to various locations in Cowley and Sumner Counties including Camp Horizon, Kaw Wildlife Area, Chaplin Nature Center, Slate Creek Wetlands, Thompson Prairie, Girl Scout Camp, and Winfield City Lake. There will be a bird banding demonstration on Sunday. South-central KS has a diverse assemblage of avifauna because of its geographic location. Birds from the east and west and north and south are commonly found in the area during spring migration. There are over 300 species that have been recorded for Sumner and Cowley counties. Some of these species are consistently recorded at some of our field trip locations, but area rarely recorded outside of those areas within the south-central region.

For example: Cinnamon Teal; Red-shouldered Hawk; King Rail; Virginia Rail; Sora; Black-bellied Plover; Snowy Plover; Semipalmated Plover; Piping Plover; American Avocet; Willet; Hudsonian Godwit; Marbled Godwit; Sanderling; Dunlin; Buff-breasted Sandpiper; Short-billed Dowitcher; Least Tern; Chuck-will's Widow; Common Poorwill; Pileated Woodpecker; Tree Swallows; Black-capped and Carolina Chickadee including hybrids.

Camp Horizon is a nice place to find Summer Tanagers, warblers, including the possibility of finding Prairie Warblers, and Painted Buntings. The Kaw Wildlife Area and Chaplin Nature Center has large tracts of floodplain forests that usually provide nice views of thrushes, Pileated Woodpeckers, Barred Owls, Wood Ducks, herons, Empidonax Flycatchers and warblers including Prothonotary and Louisiana Waterthrush. If river conditions are just right shorebird migration along the river can be quite large and even Least Terns are a possibility. Winfield City Lake typically has large numbers of waterfowl and other waterbirds, including terns, and grebes. Slate Creek Wetlands is home to more than 250 species of birds and the end of April and early May is usually the peak of shorebird migration. Past years in late April and early May have yielded Buff-breasted Sandpipers, Least Terns, Caspian Terns, Forster's Terns, Black Terns, Common Terns, Piping Plover, Snowy Plover, White-faced Ibis, golden plovers, Hudsonian and Marbled Godwits, Short-billed and Long-billed Dowitchers, most of the other KS shorebirds, herons, nesting waterfowl, LeConte's Sparrow, Sprague's Pipit, and a myriad of other upland and woodland birds. Thompson's pasture frequently contains Sprague's Pipits, and if burned Upland Sandpipers, and golden plovers. The Girl Scout Camp southeast of Winfield is a great place to observe Barred Owls, Pileated Woodpecker, Rose-breasted Grosbeak, Empidonax flycatchers, Red-headed Woodpeckers, Wood Thrush, Summer Tanager, and warblers. In recent years, three Golden-winged Warblers, Prothonotary Warblers and a Yellow-throated Vireo have been found in one day.

There is no registration fee for this trip, because all participants are responsible for their own meals and lodging. However, we request that you register for the weekend, using the form below, so that the committee can have an idea of how many people to expect. This will help us prepare for the shorebird workshop, and in determining how many trip leaders are needed. Compilation on Sunday will be at Black Creek Park, 19th and Wheat Road, Winfield, at noon. Lunch will be on your own. For additional details contact Max Thompson at 316-221-8304 or Gene Young at 316-221-8380.

### Meet Your Representatives

Hello, my name is Nate Brown and I am serving as a representative at large. I graduated from Kansas State University and currently teach third grade science, math, and social studies at West Elementary in Wamego. Being an elementary teacher, I hope to provide a different perspective on happenings in KABT. I would also encourage more elementary teachers to become involved in KABT. Please feel free to contact me at work (785) 456-8333 or home (785) 456-9823. My email address is ntbrown@kansas.net.

### Special Thanks To KanCRN – Steve Case

Thanks to Steve Case and KanCRN we are moving our KABT Website. This will give us considerably more flexibility and space. Hopefully we can design a better and more helpful site. A special feature of this is the close contact with KanCRN which should help more biology in the technology and communication phase that I feel it needs to be in. If you get a chance send a thank you to Steve Case. <scase@kancrn.org>.

It will probably be summer before I have enough time to work on the site. I have much to learn and with some of the KanCRN people I will be offering a better and more complete site. Our main goal will be to offer lab activities and materials that will assist biology teachers with their instruction. This should allow us to be better educators in the every changing field of biology.

### NABT Convention – Fort Worth, TX

Fort Worth is not very far from Kansas. They are some who plan to drive. It seems that it might be possible to car pool. If you are interested in this you can e-mail <jwachholz@midkan.net> and I will either direct you to the proper contacts or answer your message directly.



### Why I Joined!

Recently there has been a great deal of impetus on teaching topics that are not really science in our science curriculum. This was brought out with the hearings on the new state standards. I have looked to KABT and the members for support in this area and have definitely received it. I thought that it was necessary to move beyond the state and look to the other areas of support. NABT offers excellent support and has for a long time. Still looking for more support I went to the National Center For Science Education. I have received so much support that I decided to make a monthly contribution to assist them with their work. This is just one reason why I joined all three organizations. It sure helps me in the classroom. The web address for National Center For Science Education is <http://www.natcensci.org>.



J.B.S. Haldane and C. H. Waddington once argued that there are four complementary perspectives in biology: biochemical, physiological, developmental, and evolutionary. In order to lay claim to understanding any aspect of biology, the biologist must be conversant with all four of these perspectives and how they can be brought to bear on the understanding the phenomena we can observe.

John Wachholz

Since 1961, the National Association of Biology Teachers each year attempts to identify an Outstanding Biology Teacher in all 50 states, Puerto Rico, Washington D.C. and overseas territories. The program continues strong, sponsored by Prentice Hall Company which gives each awardee a world-class pair of binoculars. Award winners also receive certificates as well as public recognition and professional gratification. Each year NABT honors recipients at a special luncheon held in conjunction with NABT 's National Convention. This is an excellent way to reward outstanding biology teachers for their valuable contributions to the profession and to their students.

**WHO IS ELIGIBLE?**

All biology teachers in grades 7-12 in public or private schools, who teach primarily life sciences. Membership in NABT is not required. Candidates may be renominated in subsequent years.

**WHO CAN MAKE NOMINATIONS?**

Colleagues, administrators, students, the teacher/candidates themselves or anyone competent to judge the candidate's teaching effectiveness.

**WHAT ARE THE CRITERIA?**

Teaching ability and experience, cooperativeness in the school and the community, inventiveness, initiative and inherent strengths.

**WHAT IS THE PROCESS?**

Candidates will complete a record form summarizing their professional experience, academic background and educational philosophy. Two recommendations from colleagues closely familiar with each candidate's teaching effectiveness are required.

**HOW DO I PARTICIPATE?**

Write for nomination forms from the state's OBTA director:

Pat Lamb  
Manhattan High School  
2100 Poyntz  
Manhattan, Kansas 66502

Message from Pat:

Teaching science is hard work. Hard work needs recognition! I realize that the reasons we're in the classroom is because we love teaching, we love our students, we love our subject, and we believe in the power of education. And while its obvious that no one enters education for the money or the recognition, isn't it still gratifying to know that someone recognizes your efforts.

Biology is special and it takes special people to teach it. Won't you take ten minutes to nominate a colleague. Even if the nominee does not have the time to fill out the forms, at least they would know that you felt they were a worthy candidate. That recognition alone would be worth your ten minutes.

The **DEADLINE** for submitting nomination materials for consideration is **March 20.**



\_\_\_\_\_  
Outstanding Biology Teacher Award Nomination Form

Name of Candidate: \_\_\_\_\_

Candidate's School: \_\_\_\_\_

School Address: \_\_\_\_\_  
\_\_\_\_\_

School Phone: \_\_\_\_\_

Your Signature: \_\_\_\_\_

Your Title / Connection To Candidate: \_\_\_\_\_

# The Kansas Association of Biology Teachers Officers - Representatives - Board Members

## President

Lisa Volland  
2609 SW Morningside Dr  
Topeka, KS 66614  
(785) 273-1810  
Topeka West High School  
2001 SW Fairlawn  
Topeka, KS 66604  
(785) 271-3529

## President Elect

Harry McDonald  
11917 W 143<sup>rd</sup>  
Olathe, KS 66062  
(913) 897-9630  
Blue Valley High School  
6001 W. 159th Street  
Stilwell, KS 66085  
(913) 681-4200

## Vice-President

Sandy Collins  
906 E. 543 Road  
Lawrence, KS 66047  
1-785-748-0863  
West Junior High School  
2700 Harvard  
Lawrence, KS 66049  
1-785-832-5500  
scollins@raven.cc.ukans.edu

## Past President

Terry Callender  
15960 Snodgrass  
Wamego, KS 66547  
(785) 456-7924  
Wamego High School  
801 Lincoln  
Wamego, KS 66547  
(785) 456-2214 Ext. 123  
FAX (785) 456-8125

## Treasurer and Newsletter Editor

John Wachholz  
2311 Applewood Lane  
Salina, KS 67401-3707  
(785) 825-7742  
Salina High School Central  
650 E. Crawford Street  
Salina, KS 67401-5119  
(785) 826-4751  
FAX (785) 826-4740  
jwachholz@midkan.net

## Secretary and

### KACEE Representative

Pat Wakeman  
24549 Sandusky Rd.  
Tonganoxie, KS 66086  
(913) 845-3208  
Tonganoxie High School  
Box 179 24-40 Highway  
Tonganoxie, KS 66086  
(913) 845-2654  
FAX (913) 845-3716  
pwakeman@nehub.nekesc.  
k12.ks.us

### Region 1 Representative

Ernie L. Brown  
825 Main  
WaKeeney, KS 67672  
(785) 743-2972  
Trego Community High  
School  
1200 Russell Avenue  
WaKeeney, KS 67672  
(785) 743-2061  
FAX (785) 743-2449  
ebrown@ruraltel.net

### Region 2 Representative

Pat Lamb  
3014 Sunnyside  
Manhattan, KS 66502  
(785) 776-1438  
Manhattan High School  
2100 Poyntz  
Manhattan, KS 66502  
(785) 587-2100 Ext. 802

### Region 3 Representative

John Tollefsen  
24015 Loring Road  
Lawrence, KS 66044  
(785) 749-3280  
Highland Park High School  
2424 California Avenue  
Topeka, KS 66605  
(785) 266-7616  
jtollfsn@falcon.cc.ukans.edu

### Region 4 Representative

Todd Carter  
Box 346  
Forgan, OK 73938  
(405) 487-3547  
Seward County Community  
College  
Box 1137

Liberal, KS 67905-1137  
(316) 629-2643  
FAX (316) 629-2725  
tcarter@sccc.sccc.cc.ks.us

### Region 5 Representative

Mike Fell  
Rt1 Box 273  
Winfield, KS 67156  
(316)-221-5160 W  
mfell@horizon.hit.net

### Region 6 Representative

Jim Foresman  
306 Park  
Pittsburgh, KS 66672  
Pittsburgh High School  
(316) 235-3200 W

### Representative At Large

Nathan Brown  
307 Walnut  
Wamego, KS 66547  
1-785-456-9823 (H)  
1-785-456-8333 (W)

### Representative At Large

Eric Kessler  
Blue Valley North High  
School  
12200 Larmar  
Overland Park, KS 66209  
1-913-345-7300

### Journal Editor

John Richard Schrock  
1101 W. 18th Avenue  
Emporia, KS 66801  
(316) 342-3879  
Emporia State University  
Division of Biological Sci-  
ences  
Box 4050

Emporia, Ks 66801  
(316) 341-5614  
FAX (316) 341-5997  
ksnaturrl@esumail.emporia.edu

### NABT Representative

Brad Williamson  
Olathe East High School  
14545 W. 127th Street  
Olathe, KS 66062  
(913) 780-7120  
(913) 780-7137 FAX  
bwilliam@sound.net

### KABT Historian

Stan Roth  
532 Oklahoma St.  
Lawrence, KS 66046  
(785) 843-4764  
Lawrence Free State H.S.  
4700 Overland Dr.  
Lawrence, KS 66049  
(785) 832-6050 X7218  
(785-832-6099 FAX  
jroth@ukans.edu



KABT Regions



## THE TEST

At Duke University, there were four sophomores taking Organic Chemistry. They did so well on all the quizzes, midterms and labs, etc., that each had an "A" so far for the semester. These four friends were so confident that the weekend before finals, they decided to go up to University of Virginia and party with some friends up there. They had a great time - however, after all the hardy partying, they slept all day Sunday and didn't make it back to Duke until early Monday morning.

Rather than taking the final then, they decided to find their professor after the final and explain to him why they missed it. They explained that they had gone to UVA for the weekend with the plan to come to study, but, unfortunately, they had a flat tire on the way back, didn't have a spare, and couldn't get help for a long time. As a result, they missed the final.

The Professor thought it over and then agreed they could make up the final the following day. The guys were elated and relieved. They studied that night and went in the next day at the time the professor had told them.

He placed them in separate rooms and handed each of them a test booklet, and told them to begin. They looked at the first problem, worth 5 points. It was something simple about free radical formation. "Cool," they thought at the same time, each one in his separate room, "this is going to be easy." Each finished the problem and then turned the page.

On the second page was written: (For 95 points): **Which tire?**



### KABT Membership Application - Renewal - Form

Name: \_\_\_\_\_  
(Mr.-Mrs.-Ms.-Dr.-Miss) First Name Last Name

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

City: \_\_\_\_\_ State: \_\_\_\_ Zip: \_\_\_\_\_ - \_\_\_\_\_

School/Institution: \_\_\_\_\_

Position: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_ Zip: \_\_\_\_\_ - \_\_\_\_\_

Phone: Work (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ Home: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

FAX: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_ Internet Address: \_\_\_\_\_@\_\_\_\_\_

Enclosed Dues For KABT \$10.00 / Year - Life Membership Available For \$200  
National Association of Biology Teacher Dues: \$59.00 / Year

Yearly Due Date is September 1st. - Make Check Payable To KABT - Tax ID #: 48-0945206

Send Dues & Information To:

Kansas Association of Biology Teachers

John Wachholz, Treasurer

2311 Applewood Lane

Salina, KS 67401 - 3707