

Bee AWARE



MAAREC

Notes and News on Bees and Beekeeping

July 1999

No. 80

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FOCUS ON DELMARVA

Delmarva, the peninsula between Delaware & Chesapeake bays, includes 3 counties of Delaware, 9 Maryland counties (Maryland's Eastern Shore) and 2 Virginia counties. There is scattered fruit including brambles, lots of cucurbits and scattered other "truck" crops – the major agriculture is broiler (chicken) production with corn, wheat & soybean crops for processing as chicken feed. There is limited commercial beekeeping but an estimated 400 hobbyists/sideliners maintain 7000 colonies in the region – about 6000 colonies, trucked to Delmarva, are used annually for pollination, primarily for cucurbits (cucumber, cantaloupes, pumpkins, squash and watermelon). The area is an early pollen source with good buildup for colonies from a variety of early flowering plants (rape is increasingly important). The area generally has good fall sources for overwintering of colonies (asters, goldenrod, and *Bidens* spp.). The nectar flow is an early one (May/June – mixture of holly, locust, tulip poplar, brambles and clovers); July and August are dearth months unless colonies are on pollination sites, adjacent to lima bean fields or near soybean acreage. Corn, especially sweet corn, represents both pesticide risk and a summer pollen source.

The Delaware Beekeepers Association has nearly 100 members. They have an annual March meeting and a fall open hive. Occasionally as this past June they cosponsor a meeting with Maryland beekeepers. Two of the 3 countries (mid State, Kent and lower county Sussex) have active country beekeeping groups with monthly meetings (except June, July, & Aug.). New Castle County (closest to Pennsylvania) has the largest number of beekeepers, all suburban – but an inactive county group. Members frequently attend Chester Co. (PA) or Susquehanna (MD counties of Cecil & Harford) beekeeper monthly meetings. The state association is active during Ag week (March), maintains a state fair display (end of July), sponsors an annual short course, has a September honey month activity (usually in conjunction with a fall open hive), and actively participate in other displays including DE Nature Center (Ashland) and Del. Agric. museum (Dover) events. There is a NEWSY BEE circulated 4/5 times per year to members and as a newsletter exchange with other state/regional bee associations.

The University of Delaware has had an extension program in apiculture since the 1940's and bee colonies since the 1950's. Dale Bray covered apiculture (along with many other responsibilities) after extension specialist John Amos left to become extension apiculturist at VPI. (He completed a survey of Roadside honey outlets in 1939 before leaving.) Dewey Caron has been extension apiculturist since 1981. Beekeeping courses are taught each spring at the University; Chuck Mason was the instructor until the early 80's and Dewey Caron since. The lecture course remains a popular one with 40-50 students taking it each year – 15 to 20 take a lab (practical hands-on) course. Research has been limited – Dewey has only extension/teaching responsibilities – applied pollination and recently IPM approaches to mite control have been emphasized. The extension program includes a large number of extension publications and a web site (<http://udel.edu/~dmcaron>).

Delaware has maintained an active bee inspection program for over 30 years. Current state apiarist Bob Mitchell, with assistance of Jeff Brothers, inspects over _ the registered colonies annually. The program is also very active in educational programs including State Fair, assisting communities with bee problems/ordinances, monitoring to avoid Africanized honey bee entry into the state and helping insure adequate colonies for grower pollination needs.

Maryland Eastern Shore beekeeping activities center around a recent program organized by Entomology technician Mike Embrey at Wye Research & Education Center. Mike has a limited appointment for apiculture in addition to his IPM duties. There is a newsletter and bee meetings 2/3 times per year and a web site is being developed. Mike conducts extension supported research on IPM mite control techniques at Univ. of Maryland apiaries at Wye and at an experiment station in Salisbury. Earlier research included George Abrams looking at lima bean as a honey producer, Al Steinhauer who did important studies in the late 1960/early 1970's showing the economic value of honey bees to growers of cucurbits and Dewey Caron who examined cucurbit and lima bean pollination.

Maryland eastern shore beekeepers are gearing up for EAS 2000 at Salisbury State University next year. EAS was last at Salisbury 10 years ago – it was at the University of Delaware in 1986 and again in 1997. Queen rearing has been commercially conducted by at least 3 individuals – most recently with the Yugo hybrid but none is currently operating. A half dozen large beekeepers provide the largest bulk of pollination services. Colonies are highly mobile to meet the pollination need as colony numbers are inadequate within the region itself. Apiary inspection is covered by a regional part-time MD Dept. of Agriculture employee – currently Louie Koski, Jr.

The 2 Virginia counties that make up the lower eastern shore have only a few beekeepers plus a large commercial beekeeper who overwinters over 1500 colonies on the shore (a good site due to early pollen stores) and returns (after fruit pollination in the Shenandoah Valley) to pollinate ≈ 6000 acres of cucumbers.

Dewey M. Caron

NOTE: this is the first in a series about beekeeping in the MAAREC region.

2000 4-H ESSAY CONTEST ANNOUNCEMENT AND RULES

Sponsored by The American Beekeeping Federation, Inc.

AWARDS: Cash Prizes to 3 Top Winners: 1st Place - \$250.00
2nd Place - \$100.00
3rd Place - \$ 50.00

Each State Winner, including the national winners, receives an appropriate book about honey bees, beekeeping or honey. No MAAREC states participated in last years essay. **We can do better!**

TOPIC: For the “turn-of-the-century” 2000 essay contest, the essay topic is “Honey Bees and Humans through the Centuries.”

The essayists should explore the variety of ways man has utilized honey bees and their products since the beginning of this relationship. The essay can touch on the “laundry list” of ways of utilization – or can focus on one area of utilization and explore it more fully.

SOURCES: Good leads for your research include your school and public libraries, local Beekeepers, your county Extension agent, your local or state beekeepers association and/or the beekeeping professor at your state’s agricultural college. The ABF web site www.abfnet.org has links to other beekeeping sites. The 1999 winning essays are also published on *abfnet*, as are prior years’. The MAAREC site is also a good source <http://maarec.cas.psu.edu>.

The scope of the research is an essential judging criterion, accounting for 40% of your score. The number of sources consulted, the authority of the sources, and the variety of the sources are all evaluated.

Personal interviews with beekeepers and others familiar with bees and beekeeping activities are valued sources of information and should be documented. Sources which are not cited in the endnotes should be listed in a “Resources” or “Bibliography” list.

Note that “honey bee” is properly spelled as two words, even though many otherwise authoritative references spell it as one word.

- RULES:
1. Contest is open to active 4-H Club members only. 4-H’ers who have previously placed first, second, or third at the national level are not eligible; other state winners are eligible to re-enter.
 2. Requirements (failure to meet any disqualifies) –
 - Preparation for National Judging: typewritten, double-spaced, on one side of the paper following standard manuscript format.
 - Length – the essay proper: 750 to1000 words.
 - Write on the designated subject only.

- All factual statements must be referenced with bibliographical-style endnotes.
 - A brief biographical sketch of the essayist, including date of birth, gender, complete mailing address, and telephone number, must accompany the essay.
 - The word count does not include the endnotes, the bibliography or references, nor the essayist's biographical sketch.
3. Essays will be judged on (a) scope of research – 40%; (b) accuracy – 30%; (c) creativity – 10%; (d) conciseness – 10%, and (e) logical development of the topic – 10%.
 4. Essayists should not forward essays directly to the American Beekeeping Federation office. Each state 4-H Office is responsible for selecting the state's winner and set their deadline one month earlier Feb. 1, 2000 so judging can be completed at the state level in time for the winning state essay to be mailed to the ABF office before March 1, 2000. No essay received after March 1 will be considered.
 5. Each state may submit only one entry.
 6. Final judging and selection of the National winner will be made by the ABF's Essay Committee, whose decision is final.
 7. The National Winner will be announced by May 1, 2000.
 8. All National entries become the property of the American Beekeeping Federation, Inc. and may be published or used as it sees fit. No essay will be returned.

MAAREC GRANT SUPPORT

Diana Sammataro and Scott Camazine recently submitted a grant request to further support the MAAREC research program. This request was for development of an IPM approach to mite control under the Food Quality Protection Act. Honey was not specifically mentioned as a priority under the RFP (request for proposal) so the chances for funding of the regional proposal are not high. It will take several months of review and evaluation before we will know if the proposal will be funded or not.

Diana Sammataro and Jennifer Finley requested MAAREC support. Good supporting letters were received from Apiary Inspectors in NJ, MD, and PA. The Delaware Beekeepers and University of Delaware also wrote to support the IPM approach. The grant would fund field studies of several IPM combinations to determine if it is possible to reduce dependency on pesticides to better enable beekeepers to maintain necessary colony numbers/populations to meet pollination demands while insuring the highest quality honey and beeswax products possible.

SCOUT BEE BADGE IS BACK!

Were you a boy scout? Did you earn the Beekeeping Merit Badge? If so, you were among the 60,000+ boy scouts to do so in the 80+ years it was offered. Beekeepers, including many who earned the merit badge, were extremely disappointed in 1996 when, due to low use, the badge was discontinued (only 200 were awarded in that year).

Beekeepers from all over petitioned the Boy Scout Advancement committee to reinstate the badge after it was announced that it was to be discontinued. Many State, regional and local Associations sent “official” letters and several individuals began behind-the-scenes maneuvering to seek to reinstate the merit badge. There was a large outpouring and even a web site campaign to petition for reinstatement.

The Good News is the effort has been successful!! John Dalrymple, Advancement Director announced on Feb. 9, 1999 reinstatement of the Boy Scout Beekeeping Merit Badge. The pamphlet is currently being revised and Boys Life Magazine will call attention to the reinstatement this fall. The badge itself may even be redesigned. Now beekeepers everywhere must reestablish efforts to interest and recruit boy scouts so the effort is not in vain.

Scouts that attempt the beekeeping Merit Badge are 11 to 18 years of age. All need a beekeeper for a mentor. This is not an “easy” merit badge to earn. The current pamphlet (last rewritten 15 years ago) is difficult to understand – particularly for younger scouts. This is where you come in – boy scouts need mentors so individuals can get started and to help youngsters learn the basics of beekeeping.

We all speak about a lack of young beekeepers at meetings and among our beekeeping population. Boy Scouts and 4-H are two excellent opportunities to get youngsters interested and “hooked” on the joys of beekeeping. It will do no good to reinstate the Beekeeping Merit Badge if we lack participants. Did you know that 4-Hers have an essay contest in beekeeping? Did you know that no MAAREC state submitted an entry in this contest last year? Won’t you seek to recruit and mentor one or more younger beekeepers this season and next? **We need your help!**

PENN STATE/MAAREC MATERIALS

Penn State Extension, in cooperation with MAAREC, has developed several FOR SALE materials to assist beekeepers. An attractive ad is appearing in the bee journals. Copies of the materials are available for examination in your state from your MAAREC representative – each state has a Beekeepers organization, regulatory inspector and University representative to MAAREC.

One item you might find very helpful is **the FIELD GUIDE to Honey Bee Parasites, Pests, Predators and Diseases**. This 86 page manual features excellent color photos, laminated pages and a sturdy ring binder. It will very conveniently fit into a pocket. Text that accompanies the photos will help pinpoint problems you might see in the apiary.

No serious beekeeper should be without this new reference in the apiary. MAAREC recommends you have it handy to help you respond to challenging beekeeping situations.

POLLINATION BY TRAILER

Warren Seaver, S&S Apiaries, Dover, DE

At the joint state Delaware/Maryland beekeeper meeting on June 12, 1999, I, along with three other Delmarva beekeepers who pollinate fruit and vegetable crops with honey bee colonies mounted on trailers or similar devices, conducted a panel discussion on our successes and failures. Trailers make it easier to move quantities of bees into growers orchards or fields and we prefer to utilize this method as opposed to the traditional method of labor-intensive setting off individual colonies. We have found that utilizing groups of colonies of approximately 16 to a trailer, it is convenient to move colonies quickly into and out of areas where needed. We normally move trailers at night when the forage bees have returned to their hive and therefore tend to leave few orphans behind. To obtain these few stragglers, I personally have found that leaving a five frame nuc box behind where the trailer was located will pick up most, if not all, of those who were left. This box is then picked up the following evening and placed on the tongue of the trailer which was moved to the new location. Moving the colonies at least two miles away from the previous location also helps prevent drifting back to the old area.

In a normal summer evening, we often move as many as four trailers from one location to another. This translates into about six or seven hours of toil depending upon the distances traveled and also the amount of preparation needed for each trailer and its location in the field. This also means that several hours of scouting must have taken place during the day prior to moving to determine the new location for the trailers so as not to interfere with irrigation systems, grower and beekeeper access areas, most effective pollination area and also to place flags so we will easily see these new locations under the darkness of night. Close communications are required with the grower to ensure that both of us are in sync as far as planting schedules, irrigation schedules, fertilization and cultivation schedules. We also need to ensure that the new location is at the beginning of the bloom stage so that the foragers have crop flowers to visit in place of going to other blooms areas.

With this method, we are moving trailers of bees almost every night from June 15 until October 1. During this period, our colonies are pollinating cantaloupes, cucumbers, lima beans, pumpkins, squash, and watermelons for several different growers. Some of us are fortunate to have assistance and believe me it is well appreciated as the hours can be quite long and tedious especially along about Labor Day. The strength of colonies begins to dwindle as the season progresses due to the fact that most cucurbits do not yield much nectar and moving the colonies every ten days or so places stress on the bees so that they consume what stores they have saved. Some colonies must be fed sugar syrup to survive. Queenless colonies are common because a queen could be inadvertently injured while moving. We are vigilant for those colonies so that they can be requeened. We are fortunate in Delaware and Maryland to have State Apiarists who inspect our colonies frequently and inform us if they note a queen failure or other problem. Pesticide damage is not as prevalent in 1999 as it was a few years ago since most of the applicators have been educated to the value of honey bees to the bottom line for the grower as well as the beekeeper. We must be ever vigilant however, to preclude recurrence of a pesticide damage event.

Honey production is not often possible with the colonies utilized in pollination. For that reason, many of us have additional colonies which are placed in areas of high nectar/pollen flows so that we can achieve a moderate honey crop. As you can see, our pollinating with trailers methods work, but they also require a lot of effort on all concerned to ensure a successful season.

STUDENTS IN THE NEWS

Xiaolong Yang, PhD student in the Penn State Honey Bee Lab, received an Honorable Mention Award at the Penn State College at Agricultural Sciences Graduate and Undergraduate Research Exhibition. The March 1999 exhibition showcased student research projects from a wide variety of agricultural disciplines, ranging from agronomy to food science, and animal sciences to horticulture. Xiaolong presented a poster in the Entomology division. He is studying the effects that varroa mites have on the activity of the FAD-glucose dehydrogenase (GLD) enzyme in honey bees. In some insects, the GLD enzyme is important in triggering primitive immune systems to fight off diseases. Xiaolong compared the activity of GLD in honey bee pupae that had been parasitized by Varroa versus pupae that had no varroa present in their cells. He found that Varroa mites suppressed GLD activity in bee pupae. This matches another recent finding by other Penn State Bee Lab personnel that showed that adult bees infested with tracheal mites also have lower levels of GLD activity versus uninfested bees. Suppressed GLD activity may impair a parasitized bee's ability to mount an immune response, making them more susceptible to diseases. It may also contribute to the phenomenon of parasitic mite syndrome. CONGRATULATIONS to Xiaolong on his excellent poster – he will continue his PhD studies at Penn State.

Colleen Granger, University of Delaware undergraduate Science and Technology Scholar presented her poster on bee mite monitoring studies at the University of Delaware April 30th. Colleen was one of 4 students doing research in Entomology and Applied Ecology and her findings have been included in past BEE AWARE issues. Colleen will be spending the 1999 summer months in Germany on a scholarship to improve her German language abilities – not in the bee yard.

A HIVE MODIFICATION TO REDUCE VARROA POPULATIONS

by J.S. Pettis and H. Shimanuki
USDA-ARS Bee Research Lab, Beltsville, MD

Abstract

A simple modification to the hive bottom board was tested as a non-chemical or cultural control method for varroa mites. Wire mesh hardware cloth was used to replace the majority of the surface area of the bottom board underneath the brood area, allowing varroa to fall through and potentially excluding them from reentering the colony. Thirty colonies received no chemical treatment but were fitted with screen bottom boards, sticky boards or normal bottom boards. Mite fall was monitored in these colonies on a monthly basis and revealed approximately 14% and 28% lower mite fall in the two modified bottom boards compared to the normal bottom board in June and July, respectively. However, by September mite levels in all three sets of colonies had reached damaging levels. Thus, the bottom board modification slowed the growth rate of varroa, but is not sufficient alone. Mite invasion pressure into colonies was monitored using Apistan® in three colonies and increased in August and September to greater than 100 mites per colony over a three day period. This level of invasion surely added to the decline of all colonies. A modified bottom board that allows varroa to fall through and prevents direct contact with bees showed promise in the current studies by slowing varroa populations and is proposed as cultural control. Additionally, colonies with mesh bottom boards had significantly more sealed brood than colonies on normal bottom boards, an added benefit to using this hive modification. The use of a screen bottom board or screen insert in conjunction with resistant lines of bees, smoke, dusts, or other control agents should provide a more integrated approach to varroa control and could reduce the number of chemical treatments required.

See Amer. Bee Journal April 1999 for entire publication.

THE HIVE STAND

Mike Embrey, Wye Research & Extension Center, MD

The main objective of a hive stand is to keep the bee colony off the ground. We do this for several reasons. First of all, increasing the air circulation will go a long way in extending the life of the colony's bottom board and in aiding in the overall cooling of the bee colony. Even the best painted or treated wood that is in contact with the ground will eventually get wet or damp and quickly rot.

Hive stands are important to beekeepers for controlling pest problems. Pests such as carpenter ants and termites are less likely to nest or feed in the bottom board when it is elevated off the ground. Other pests such as skunks, raccoons, mice, and toads will have less opportunity to get at a hive when it is off the ground. Stands also aid in getting the hive away from ground vegetation. Dead bees and trash from the hives makes great fertilizer. Plants will rapidly take advantage of this and grow rank in front of the hive. The beekeeper would have to spend extra time cleaning out these plants because if left there the plants would begin to interfere with bee flight activity. Bee stands also bring the hive closer to the beekeeper making hive work more convenient. The amount of bending and lifting that a beekeeper needs to do would be minimized when the hive is 15-18 inches off the ground.

What to make a hive stand from is entirely up to the beekeeper. There are as many different types of stands as beekeepers. An economical way of making a hive stand is by using wooden pallets. A beekeeper can find free pallets around printing shops, newspaper plants, hardware stores, on farms or in the freebie section of your local paper. Most of the time the pallets are there for the taking but it is always good politics to ask first.

When the pallet is brought home, the first decision is how many hives are going to be sitting on it. Most pallets will hold four hives easily with one hive facing in each direction. A beekeeper might find this difficult to work around. An alternative choice would be to cut the pallet in half so that there is now a hive stand for two hives. These half pallets are much easier to work with and moving them requires less lifting.

Pressure treated wood in either 2x4's or 4x4's can be used for legs to increase the height of the stand to any level the beekeeper feels comfortable with. The legs can be attached to the pallet with deck screws. When finished, place the hive stand in the bee yard with a flat stone or brick under each leg. These stands will last for many years with a minimum of care and are very cost effective.

SMALL HIVE BEETLE

The last BEE AWARE included general information on the **Small Hive Beetle**. At that time (March) the small hive beetle had been found in 4 southeastern states. By June, 3 MAAREC states have experienced small hive beetles first hand. With news that small hive beetles had overwintered successfully in Minnesota (within colonies moved from Florida) all the MAAREC state Apiary Inspectors have been busy looking for the beetles.

Pennsylvania – Jim Steinhauer found 2 separate instances of small hive beetle originating from package bee shipments into Pennsylvania. The state imposed a quarantine on movement of honey bees into Pennsylvania from any state where small hive beetles are established unless the bees are certified free of beetles and their larvae. Agriculture secretary Samuel E. Hayes, Jr. indicated such a quarantine was needed because “a healthy honey bee population is critical to our apiary industry and to Pennsylvania’s fruit and vegetable industry which relies upon bees to help pollinate plants.”

Jim reported “considerable feedback” to a memo sent to all PA beekeepers after the first find of small hive beetles in packages received in south-central Pennsylvania. The ten PA apiary inspectors are visually checking all colonies to insure that additional infested packages were not shipped into the state. Beekeepers are required to destroy or treat colonies with coumaphos if small hive beetles are found infesting colonies.

New Jersey – Grant Stiles has been “extremely busy” with inspections for small hive beetles. A commercial beekeeper brought colonies from Florida into the state with small hive beetles despite treatment with coumaphos before entry. Forty colonies (from over 6000 moved from Florida to New Jersey blueberry pollination) have been isolated in a quarantine yard in Salem Co. for research studies by Jeff Pettis of USDA. The research will be directed toward developing sampling methods, beetle movement in an apiary and determine how low level adult infestations will behave under New Jersey conditions. In May a number of packages arrived from South Carolina with small hive beetles. The packages were distributed widely including into northeastern Pennsylvania.

New Jersey had fortunately had a Beekeeping Advisory Group meeting to discuss treatment protocols to help prevent establishment and spread of small hive beetles. The treatment protocol established by NJDA after considerable input by the Advisory group will be: (1) Colonies found with small hive beetle larvae need to be placed in a quarantine yard approved by NJDA where the infested frames are to be destroyed by either burning, melting, freezing, or fumigating. The beekeeper must then treat soil around the infested colony or colonies with Guardstar®. (2) Colonies found with small hive beetle adults are sent to a quarantine yard where the colonies should be treated (optional) with Coumaphos® and surrounding soil treated (mandatory) with Guardstar®. Colonies in quarantine areas will not be released until the NJDA inspects them and declares them free of SHB.

Maryland – Jeff Pettis of USDA Beltsville established a quarantine facility at Beltsville for small hive beetle studies. Jeff has traveled to Florida several times for research. Jeff is monitoring for control strategies at the NJ quarantine facility this summer.

UPCOMING EVENTS

PSBA '99 Summer Picnic

July 11, 1999. Morris Arboretum, Montgomery Co.
For more information contact Jennifer Finley at
814-865-1731 or Harold Jenkins 215-855-5613.
NOTE: Meeting includes rededication of
L.L. Langstroth Memorial Bench.

New Jersey Summer Picnic/Auction

July 24, 1999. Bob Harvey's
Contact Cathie Skore 973-579-5864.

Eastern Apiculture Society Conference & Short Course

July 26-30, 1999. Knoxville, TN. For information
contact John Skinner at 423-974-7138
jkskinner@utk.edu or Marlene Thomas at
423-376-1838 gleuman@mindspring.com

Delaware Open Hive

Sept. 11, 1999. Redden State Forest. For
information contact Dewey Caron 302-831-8883
dmcaron@udel.edu or Bob Mitchell, Del
Dept. of Agr. 800-282-8685.

APIMONDIA '99

Sept. 12-18, 1999. Vancouver, Canada. Contact
www.apimondia99.ca

West Virginia Fall Meeting

Oct. 1-2, 1999. Cedar Lake Conf. Center, Ripley
Contact John Campbell 304-478-3675

Maryland MSBA Annual Meeting

Nov. 6, 1999. MDA Annapolis Contact Dave
Simmons 410-734-4188 or Bart Smith, MDA 410-
841-5940

PSBA '99 Winter Meeting

Nov. 12 & 13, 1999. Country Cupboard, Lewisburg,
PA. For more information contact Jennifer Finley at
814-865-1731.

For the latest and best information on each MAAREC local/regional association meeting plus to keep up-to-date on bee and beekeeping related activities the following state newsletters are your best sources:

Delaware: The NEWSY BEE – published 4/5 times per year (last issue May 1999). Editor Dr. Dewey M. Caron, University of Delaware, Dept. of Entomology & Appl. Ecology, Newark, DE 19717. Tel. 302-831-8883. dmcaron@udel.edu

Maryland: The BEE LINE – published 4 times per year (last issue May 1999). Editor John D. Moyer, 713 Dooges Dr., Millersville, MD 21108. This newsletter dates from 1908.

New Jersey: The NEW JERSEY BEEKEEPERS ASSOCIATION NEWS – published 6 times/year (last issue Jun/July 1999). Editor Jim Purvel, 609-758-3215, JimP562@aol.com. NOTE: This is an AWARD WINNING newsletter – it came in as 2nd best of over 30 beekeeping newsletters as judged by A.I. Root Co.

Pennsylvania: THE PENNSYLVANIA BEEKEEPER – published monthly (last issue July 1999). Editor Yvonne Crimbring, RR 1, Box 315, Canton, PA 17724. Tel. 570-673-8201. An outstanding newsletter loaded with good information including meeting schedules of the numerous county/regional PA bee associations.

West Virginia: WEST VIRGINIA BEEKEEPERS NEWSLETTER – published 2x/year (Apr./Sept.). Editor John Campbell, 102 First St., Parsons, WV 26287. Tel. 304-478-3675.

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