SUGARING FOR MOTHS.

The method of capturing moths by baiting with sugar is an interesting one and under proper conditions will add many new specimens to the collection.

My first experience in "sugaring" was in the summer of 1930, a year that was unusual for the abundance of insect life in general. This fact may account for the unusual success I had. At that time I lived in a small country town in Illinois. About a mile and a half from my back door was a small meadow patch not more than two square miles in area. This place consisted of low hills more or less sparsely covered with a variety of trees, such as oak, hickory, elm and walnut. A little brook bordered with all sorts of shrubby meandered along between these hills. There were many fallen tree trunks and exposed roots which formed shelter for caterpillars during the day and a note was at that time says that I flushed ten caterpillars from one such shelter at one time.

For my first experiment in "sugaring" I chose the low slope of one grassy hill whereon trees were widely scattered, forming a sort of grove. For bait I used stale beer drippings into which I stirred a liberal amount of brom sugar. As my route did not lie along a path, I strung from tree to tree so that it would be more difficult for each one after dark. The bait was applied at dusk so that by the time the last tree was baited it was already dark. After about five or ten minutes I proceeded to make captures and the results were surely all that any one might wish for. One night I captured about seventy-five caterpillars in the space of about one hour. I found that after the trees had been baited for several successive nights the results were better than on the first attempts. Also, last, suiter nights when there was moonlight gave better results. Strange to say, a visit to this region the following day failed to find any more than the usual number of caterpillars, and these always as well hidden as in any other region.

To the wishing to try "sugaring" for moths I would suggest to select a place not too heavily wooded and near the edge of the woods a hot, moonless night, and above all, mark your path well.

-- Harold I. O'Byrne.

SUGARING FOR MOTHS.

Further investigation may demonstrate that the importance of such produce insects in the economy of nature has not been appreciated sufficiently in the past, and here is a big field for profitable study.

-- Dr. E. P. Minors
WASPS—FIERCE TOWARDS ALIENS—WELCOME STRANGERS OF OWN SPECIES
(from Science Service)

Wasp's have a strong racial feeling. They will welcome strangers belonging to their own species, even though they come from nests many miles away. But if a strange wasp of a different species alights on the nest, it means instant battle.

This, in outline, gives the results of experiments on wasps in a number of nests which Philip A. Rau hung up in his third floor laboratory and studied in greater intimacy than most of us would want to bestow on the all-maligned "foot-tails."

Mr. Rau's data will be given in detail in a forthcoming issue of the Journal of Comparative Psychology.

Mr. Rau's collection contained three species of the genus Polistes. He found that in general if an insect of a given species were transferred to a nest of the same species it would either be welcomed by a committee of the "home folks" or, at the very least, be left tolerantly alone, to make itself at home if it chose. Sometimes a stranger wasp would become a permanent member of its host colony.

A wounded wasp introduced into a strange colony of its own species would frequently receive apparently solicitations attention from its sister-insects. They would lick its injuries and massage its body and wings.

As an extreme case, Mr. Rau pined to one nest a dead wasp of the "right" species which had been kept for several years in a museum case in an atmosphere saturated with creosote vapor. Most of the wasps paid no attention to the dummy. A few made mildly hostile gestures and then became indifferent. But one determined female apparently had opinions of her own about the strange smell-invading intruder. She attacked it fiercely and was not content until she had bitten off both its wings. Then she retired and treated herself to a most elaborate and lengthy toilet.

When a wasp was placed in a colony of a different species there was no friendly welcome, nor even an indifferent toleration. Everybody was up in arms at once, and the stranger usually got very

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OUR FIRST MAGNITUDE STARS.

In response to requests we publish a list of the first-magnitude stars in order of their brilliance and showing their colors. In observing stars one should train himself to notice star colors which are an index to much of our knowledge of them.

The subject of star colors has been discussed by the Astronomy Group a number of times during the past year or two, so it will suffice to say here that if we arrange a series of stars of different colors in the sequence: red, orange, yellow, pale yellow, white and blue, we shall have them arranged in the order of their temperatures, the coolest first and hot test last. It is also true that on the average, red or orange stars will be vastly greater in dimensions than the white or blue ones. The red and orange stars have extremely low densities, (that is the amount of matter contained in a unit of volume is small) while those of blue or white will be of average density. The densest stars do not shine very brightly and consequently are not very conspicuous, in fact none of the red dwarf's and "white-hot" dwarf's, the most dense of all, are visible to the naked eye.

**The First Magnitude Stars**

<table>
<thead>
<tr>
<th>Star</th>
<th>Mag.</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sirius</td>
<td>-1.6</td>
<td>white</td>
</tr>
<tr>
<td>Vega</td>
<td>0.1</td>
<td>white</td>
</tr>
<tr>
<td>Capella</td>
<td>0.2</td>
<td>yellow</td>
</tr>
<tr>
<td>Arcturus</td>
<td>9.2</td>
<td>orange</td>
</tr>
<tr>
<td>Rigel</td>
<td>0.1</td>
<td>blue</td>
</tr>
<tr>
<td>Aldebaran</td>
<td>0.3</td>
<td>pale yellow</td>
</tr>
<tr>
<td>Altair</td>
<td>0.9</td>
<td>white</td>
</tr>
<tr>
<td>Betelgeuse</td>
<td>0.5-1.4</td>
<td>red</td>
</tr>
<tr>
<td>Aldebaran</td>
<td>1.1</td>
<td>orange</td>
</tr>
<tr>
<td>Spica</td>
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<td>blue</td>
</tr>
<tr>
<td>Pollux</td>
<td>1.2</td>
<td>orange</td>
</tr>
<tr>
<td>Antares</td>
<td>1.2</td>
<td>red</td>
</tr>
<tr>
<td>Fomalhaut</td>
<td>1.3</td>
<td>white</td>
</tr>
<tr>
<td>Deneb</td>
<td>1.3</td>
<td>white</td>
</tr>
<tr>
<td>Regulus</td>
<td>1.5</td>
<td>blue</td>
</tr>
</tbody>
</table>

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WASPS—FIERCE TOWARDS ALIENS—SHORT SHRIFT unless he was lucky enough to escape. The intruder would instantly become the center of a mass of struggling, biting sting-thrusting insects.

Their hostility was just as great against the dead body of an alien as it was against a living insect. The same mummified, creosote-flavored wasp that reused the antagonism of only a single individual in a nest of its own species produced a general riot when it was pinned on the nest of either of the other two species.
Webster Groves Nature-Study Society
A BRANCH OF THE AMERICAN NATURE-STUDY SOCIETY
(Organized in 1929)
Webster Groves, Mo.

ANNOUNCEMENTS FOR AUGUST - 1950

There will be TWO outings this month:

The first one will be on Saturday/Sunday August 16th and 17th, to Mrs. and Miss Schmedelbach’s summer cottage near Allenton, Mo. Take Clayton Road to Dallas Road, thence to Manchester Road; from there to Allenton Road and South to Allenton, where directions will be left at Gross’ Grocery Store as to route in their place, generally known in Allenton as the "Tom Evans" house.

Free from the glare of city lights is an open field for the ASTRONOMY GROUP and others interested in star study on Saturday night; while on Sunday are opportunities for your choice of field trips on favorite subjects.

Bring cots, blankets, field glasses, small telescopes, flash lights and plenty to eat, and stay at the cottage over Saturday night. Miss Schmedelbach expects most arrivals at the Grocery store on Saturday afternoon between 4 and 5 o’clock.

The second trip will be to Our Own Nature-Study Lodge on High Ridge Road South of Antire Road and West of Valley Park, on Saturday/Sunday August 23rd and 24th.

It will be more than worth the discomforts of a ride over the turn up Antire Road to spend a peaceful Saturday evening at the Lodge, ready for a six o’clock Sunday morning Bird Walk with the ORTHOPTEROLOGY GROUP in charge of Mr. Walter Palmer, looking for the passing Fall migrants and other birds - to go later in the day with Mr. Leslie Hubricht on an ORTHOPTEROLOGY GROUP trip and with Mr. Harold O’Brien on an ENTOMOLOGY GROUP trip.

Bring cots, blankets, field glasses for birds and flash lights for possible cave investigations, and enough to eat to carry over Sunday.

OTHER GROUP MEETINGS:

PHOTOGRAPHY: Monday evening August 4, 8 PM, at the Phil Rau residence, 545 East Argonne Drive, Kirkwood. Subject, "Coping Methods." Mr. David Rau, chairman.

NATURE-ENTOMOLOGY: Friday evening August 29, 8 PM, at the U.S. Entomological Laboratory, 527 Ivanhoe Place, Webster Groves. Subjects: "Sounds made by fishes," Mr. P.A. Vogel, and "Other midsummer melody" by other members. Mrs. Satterthwait, chairman, will be back home and in charge of the meeting.

Come - and bring your friends.

Anne A. Jones, Secretary.