# SENIOR LIVING

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# Behold the Magnificent Monarch Butterfly

### BY APRIL O'DAY

Every time I visit White Horse Village, I meet engaging, knowledgeable residents with captivating tales to tell. Alan and Barbara Mennig top the list. Although the couple, who will celebrate their 50th wedding anniversary this August, has countless chronicles to share, this one features monarch butterflies. Alan's wit and Barbara's observations weave a fascinating story.

She is a former elementary school teacher, which proves to be an asset as she discusses the mystique of the monarch. Alan, a business accountant, is the consummate fact checker. They have a full calendar both on and off White Horse Village grounds. Barbara reads, writes, sews, and loves nature. Her husband, also a nature enthusiast, enjoys gardening, freshwater fishing, and classic movies. They co-chair the White Horse Bluebird Trail Committee, participate in the Harvesters' Garden, sing in the chorus, and play in the handbell choir. Their two children and four grandchildren are ultimate joys.

In addition to White Horse Village's attractive variety of activities, another major plus for the Mennigs is the community's location. "The main reason we moved here," says Alan, "is because it is so close to Tyler Arboretum and Ridley Creek State Park. Our son lives in Wallingford, which is very near. We contemplated a move to retirement apartments, but White Horse Village provides so many benefits. We relish the layout of the community and grounds. Being able to plant a garden and step outside the door of our spacious villa to enjoy the flowers is wonderful."

But I digress. Back to the butterflies. There is something magical about monarch butterflies. They are absolutely beautiful, boasting diaphanous wings of brilliant orange and black. Watching them flit and flutter among flowers is a relaxing and happy way to spend an afternoon. It's fun to imagine monarchs' travels and adventures. But, those musings pale in contrast to the butterfly's true biography as told by the Mennigs.

Barbara's enchantment with butterflies began in childhood. "My siblings and I had collections, and Alan and I expanded our interest when we got involved with Tyler Arboretum's Butterfly program."

"Tyler is a wonderful 650-acre botanical treasure, juxtaposed with Ridley Creek State Park," continues Alan. "It's a great place for kids to learn and for adults to experience nature. We were asked to assemble a group to monitor and supervise the butterflies. The Butterfly House Management Team (BHMT) is comprised of five volunteers with us as leads. Our main purpose is to help people understand the life cycle of the butterfly. Visitors from 5 to 95 are enthralled. Barbara and I don't consid-



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er ourselves experts, but we do have a deep interest." "We love learning," she adds.

"For example, monarchs overwinter in Mexico, heading to the same locale each year. Another interesting fact is how to determine if a monarch is male or female. If you look closely, you will note thicker veins in the wings of one butterfly. That is the female. The male has thinner veins and a bulbous dot on one of the inner veins of the hind wing. This dot is the pheromoneproducing scent gland, which is used to attract a mate."

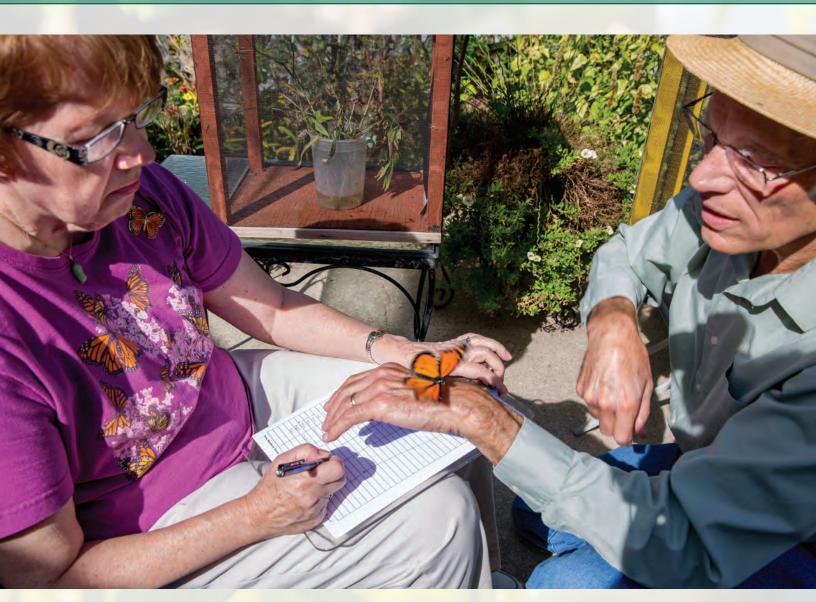
The Mennigs' association with the Tyler Arboretum intensified their fondness for butterflies. To augment the monarch population, Alan followed Tyler's template and erected two rearing boxes, measuring 24 by 18 by 12 inches. He planted a variety of flowers and an abundance of swamp milkweed in their backyard garden. "The monarch only lays eggs, one at a time, on the underside of milkweed leaves," explains Alan. "They are not so particular about sources of nectar, but if they don't drop the eggs on milkweed, caterpillars will die. The female butterfly moves about from plant to plant and a chemical reaction in her feet, which is where she tastes, guides her to the proper host landing. Monarchs rarely make mistakes," he insists.

Alan removes larvae (caterpillars) from the milkweed and places them in the rearing box, then adds plenty of host branches for them to eat until they are ready to pupate. "Their only task is to eat and grow," chuckles Barbara.

Hanging upside down in a J shape, the young caterpillar begins its first instar. The second instar shows the initial stages of molting, or shedding skin; it doesn't grow with them and gets too tight. This process occurs five times before the caterpillar is ready to pupate and form the chrysalis, which is also called pupa. The pupa is striking in its vivid green beauty. Little golden bumps enhance the top; in its final days, it becomes delicately transparent.

After approximately five to 15 days, the butterfly is ready to emerge. Its wings are very wet, and it cannot yet fly. It pumps fluids from its abdomen through wing veins, causing expansion to full size. After it is dry, the baby exercises flight muscles and soars in splendor. "The metamorphosis is like giving birth, only a lot easier," suggests Barbara with a laugh. "It makes us proud to be part of it."

Tagging is the next step for the Mennigs. Alan's task is to attach a miniscule label to the monarch. Barbara records the information, which includes the tag number, sex of the butterfly, release date, tagging location, and either a wild or reared designation. This data is sent to MonarchWatch. org, and butterflies are released. "We may release one a day, two a day, or a dozen, but not all at once," points out Alan. "We



## (Above)

Barbara and Alan releasing a monarch

## (Right)

Alan removes larvae (caterpillars) from the milkweed and places them in the rearing box, then adds plenty of host branches for them to eat until they are ready to pupate.



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raised and tagged 185 monarchs in 2015, a record for us."

This news is positive because of the recent history of monarch migration. Alan clarifies: "Going back to 2012 and 2013, the number of monarchs in Mexico ready to migrate north declined by approximately 90 percent. It had been steadily decreasing, but those years were an astronomical drop. It's believed a good portion of the problem stems from lack of milkweed. Agricultural engineers have successfully bred crops to be resistant to herbicides. Farmers thus spray fields without fear of disturbing their harvest. The weed deterrent kills milkweed that normally grows between rows of plantings. No milkweed, no place for monarchs to lay their eggs, and hence, no butterflies."

Alan is pleased to report that farmers, scientists, and politicians are becoming aware of the dilemma, and pursuing additional plans to increase the number of monarchs. According to several online news sites, a national strategy was introduced last year to increase the monarch population, as well as to mitigate honeybee loss and restore bee and butterfly habitats. The





program establishes a butterfly migration corridor or flyway from Mexico to Canada. The U.S. Department of Transportation and the U.S. Fish and Wildlife Service will be responsible for rehabilitating butterfly habitats along I-35. The dual goal is to protect monarchs from extinction and save crops. "After all," remarks Alan, "butterflies are among the top pollinators."

The Mennigs share their butterfly-friendly plantings with many White Horse Village residents and staff members. They also deliver butterfly presentations in the community's auditorium and invite residents to participate in tagging and releasing monarchs. To further help monarchs flourish, the Mennigs encourage people to plant milkweed in their gardens. "It looks lovely, and the result is even greater – more butterflies," concludes Alan. **CCL** 

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