

MennoExpressions

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December 2, 2007

The Friendly Beasts

The Sighting

By Lali Hess

The first time I thought I witnessed aliens was in 1998, out in the field behind our house. It was a sunny, crisp day in February, perfect for early spring planting, and I was out seeding snow peas. The sound was distant at first, but so unfamiliar I stopped working and paid attention to the air. I heard it again, this time more distinctly. It was a hollow, unhurried chorus of trills: flutelike, but sad. I had the odd feeling that it was very far away and close at the same time, the way a train whistle can sound at night sometimes. I looked first at the electric wires, thinking I was hearing some kind of acoustic interference. Then I looked skyward, certain to see the saucer and beaming light. It's hard to convey, now, nine years later, just how certain I was that I was listening to alien waves. In the thirty previous seconds I was sure I had eliminated every other possible explanation.

But as I stood staring at the sky, a remote flock of birds began to emerge against the blue, much higher than geese fly, slowly circling and then straightening themselves into a crooked V, resuming north. Another flock appeared behind it, and another. Their call was so obvious now. I watched for the rest of the afternoon, as flock after flock passed leisurely overhead. Sandhill cranes, I came to learn, were migrating north to Canada.

A few days later a flock stopped to rest in the field across the road, and we jumped in the pick-up, driving over ridged corn stubble to get a closer look. It felt as though we were witnessing a private ritual, something forbidden to humans. Cranes dancing and calling, unfolding enormous wings, strutting, feeding on insects in the soil, resting. We watched in amazement. The large birds, road weary and far from home, were interacting like any extended family after days spent together. These beings weren't alien at all—they were as familiar as my own kin.

Since then, I have made it a practice of keeping my ears alert in late February and early November when the cranes pass over. You can almost predict the day—sunny and unseasonably warm, often a day when I'm drawn outside anyway. The skies sing and I find a sheltered spot in the lawn from which to gaze to the heavens.

Drawing of sandhill cranes by Lali Hess

Why I Watch Birds

By Ed Liechty

First of all, I would probably not qualify as a birdwatcher. I do not keep a species list, cannot tell one species of sparrow from another (or even care) and have never picked a vacation spot based on the opportunity to see a rare species. And I am really bad at identifying a bird by its song.

Nevertheless, I do spend a lot of time watching birds. I have really never given much thought as to why. However, after deep soul searching, I was able to come up with a few reasons.

1. Life would be much less enjoyable if there were no birds. I keep a well-stocked birdfeeder with the expectation of seeing chickadees, downy woodpeckers and finches daily and piliated woodpeckers occasionally. The rare visitor, such as a Cooper's hawk or rose-breasted grosbeak is exciting.

2. Birds can teach us to find joy in the midst of adversity. I remember the day when after a particularly bad drive at Coffin

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Editor's Desk

"The Friendly Beasts" is dedicated to the stable animals that welcomed Jesus at his birth. *SMW*

What I Did On My Summer Vacation

By Mel Glick

Dieselephants? I'm fascinated by trivia, especially related to the animal kingdom. Recently I heard a recording of an elephant in Kenya—its rumble mimicking exactly the sound of the diesel engines in lorries traveling nearby. "Naïve" elephants brought from a distant wildlife area soon learned the new sound and could rumble with the best of them. I wondered, what else are these elephants learning from their exposure to nearby trucks and truckers?

Gracklamboni? One morning recently I saw something that left me blinking to be sure I wasn't dreaming. Grackles, at least a hundred of them, were spaced about on our lawn; and all the birds were facing northeast toward the sunshine. They were busily snatching up bugs from the grass, moving one or two steps forward with each peck at the ground. Within two minutes, the whole flock had moved away from our block and toward First Mennonite's lawn, but not by walking or hopping on the ground. In a constant fluid movement, those grackles at the rear of the group would rise and fly over their companions to the head of the pack, where a stretch of unharvested lawn was theirs briefly. The rolling, continuous maneuver made the flock seem like an iridescent blanket rolled forward by a tailwind. Wouldn't it have been more efficient for the gaggle of grackles to simply all lift up at the same time and move one lawn north? Just wondering which of the grackles decided hopscotch would be the game of the morning.

Sometime in the last few decades a woodworking marketing genius renamed plain old bug-infested wormy maple as "ambrosia maple." The ambrosia beetle that causes the tiny holes in trees with sugary sap captures my imagination because of its true occupation—farming. The ugly little beetle bores a hole through the bark and straight into the tree to deposit an egg at the end of a short side-tunnel it creates. At the same time, the beetle is inoculating the walls of the tunnel and side arm "cradle" with mold spores collected in a basket of tiny hairs on its thorax. By the time the ambrosia larvae is hatched and ready to eat food, the fungus growing in the bored tunnels will provide the nourishment needed so the new generation of beetle can emerge and continue the process of making ambrosia maple. The resulting grey streaks (spectacular red in the case of box elder trees) make for a beautiful pattern of grey (or red) and white striations that my woodturner friends crave for their habit.

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More Than Toys

By Gabriel I. Kauffman

He is gone, no longer part of me, my hamster is gone.
Sometimes when I am sad he comes back and comforts me
even beyond the grip of death.

He was only a small little guy when I got him,
and all that he had known was a plastic box and his family.

He was chosen to leave, and he was scared.

I treated him as well as I could and then he started
to become more than just a pet,
more than just an animal to have fun with.

He started to become part of me and I part of him.

But then that one morning as I came home from church,

I was told that my best friend had died in his sleep.

No longer did I have a friend to play with and talk to,
all I had were memories that have never been lost.

I lost more than just a friend,
more than a toy, I lost part of me.

Lady

By Sue Turner

Entering the door to the Turner household, you would immediately be greeted by an excited black and white cocker spaniel. Your only choice was to acknowledge her presence. The second greeter would be Lilly, the friendly gray and white cat. Oh, yes, then the reason for your visit . . . to see Sue.

Most of my friends, being animal lovers themselves, would readily respond to Lady's engaging whines, friendly barks, and, oops, don't get your face too close to hers because kisses were readily available, also.

Of course I have other friends and family who, let's say, tolerate people like me and their "four-legged children." Somehow they just don't "get it." In the presence of Lady they were about to become a part of her world, whether they wanted to or not. Somehow she was always drawn to the person who was least interested in her. She felt like her mission was to "change your mind," and, of course, to engage you in the game "fetch the tennis ball." Ignoring her was not an option. The ball would be dropped at your feet, in your lap or shoved by her nose under your leg or arm. If that didn't get your attention, then there were her pleading eyes and short barks. Most would respond to Lady by saying, "Okay, Lady, just a few times, and then that's it." How many times had I heard that response? Little did they know her agenda.

I have many wonderful memories with Lady. She was truly a gift from God. She went through good and bad times in my life. Her wonderful personality was never wavering, and her presence in my life was a gift. Thank you, Lady. I will always treasure our time together.

Do All Dogs Go To Heaven?

By Ryan Ahlgrim

All Dogs Go to Heaven is an animated movie that came out in 1989. I never saw the movie, but the title leads me to wonder: Do all dogs go to heaven? Or to put the question more broadly: Do animals go to heaven?

In the Gospel of John, Jesus tells his disciples on the night before his crucifixion, “In my Father’s house there are many dwelling places. . . . I go to prepare a place for you.” He doesn’t say anything about a place for animals. Likewise, the apostle Paul tells the Christians in Thessalonica that they should not grieve the death of believers. Christ will return from heaven, “and the dead in Christ will rise first. Then we who are alive, who are left, will be caught up in the clouds together with them to meet the Lord in the air; and so we will be with the Lord forever.” Again, no mention of animals. And in the Book of Revelation we are told that God will create a new heaven and a new earth, with a new Jerusalem filled with resurrected people. But not a word about animals.

But just because the Bible gives most of its attention to people does not mean that God’s desire and love is limited to humanity.

The Bible is focused on the saving of humanity. Images of heaven or a new creation are dominated by a healed and transformed humanity. Frankly, the animal kingdom is given short-shrift. At first glance it would appear that the Bible has no interest in the ultimate destiny of animals and that the implied message is that animals do not go to heaven.

But just because the Bible gives most of its attention to people does not mean that God’s desire and love is limited to humanity. The Bible begins with God creating every aspect of the universe including the animal kingdom: “So God created the great sea monsters, and every living creature that moves . . . and every winged bird of every kind. And God saw that it was good. God blessed them saying, ‘Be fruitful and multiply . . .’” (Genesis 1:21-22). Then God creates humanity, which is given the task of taking care of all creation, and God gives the humans and animals vegetation (not other animals) to eat. We are given a picture of an ideal creation in which there is no killing or bloodshed, and animals and humans live in harmony. This is the ultimate good that God creates and desires.

God’s love and concern for animals is displayed in the Psalms: “O Lord how wonderful are your works! In wisdom you have made them all; the earth is full of your creatures. Yonder is the sea, great and wide, creeping things innumerable are there, living things both small and great. There go the ships, and Leviathan that you formed to sport in it” (104:24-26). Leviathan is a sea monster and is often used as a symbol for evil. And yet, even Leviathan is created by God so it can have fun swimming through the waves! The Psalm goes on to say, “These all look to you to give them their food in due season. . . . When you hide your face, they are dismayed; when you take away your breath, they die and return to the dust. When you send forth your breath, they are created; and

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you renew the face of the ground” (104:27-30).

God cares for and sustains all of creation, not just humanity. The psalmist affirms, “Your steadfast love, O Lord, extends to the heavens, your faithfulness to the clouds. . . . You save humans and animals alike, O Lord” (36:5-6).

But these are all passages about life here on earth. What about after death? Does God’s care for the animal kingdom extend beyond the physical realm?

Christians usually think of salvation as a spiritual event disconnected from our bodies and the rest of creation. We imagine our souls floating away from our corpses and going into a spiritual realm where we will join our friends and family in some sort of eternal state of mental bliss. The logical question then is: Do animals have souls so they can join us? Will the pets we loved need to have trust in God, or do they get into heaven because they are morally innocent? Will heaven be filled with every creature that ever lived? (And I can’t help but wonder: Will all those billions of chickens, pigs and cows that were penned up, mistreated and slaughtered for our food want some sort of revenge?)

But this disembodied, spiritual existence is not what the Bible means by salvation. God does not want humanity to find a spiritual escape from the world; God wants to heal and transform the world. Paul tells the Christians in Rome, “For the creation waits with eager longing for the revealing of the children of God; for the creation was subjected to futility . . . in hope that the creation itself will be set free from its bondage to decay and will obtain the freedom of the glory of the children of God. We know that the whole creation has been groaning in labor pains until now; and not only the creation, but we ourselves . . . groan inwardly while we wait for adoption, the redemption of our bodies” (Romans 8:19-23).

Paul seems to be saying that this world with its cycles of death and decay, where one living creature must destroy another living creature in order to survive, is going to be transformed by God. It isn’t our souls that are going to be saved, it’s *everything* that’s going to be saved. All of creation—our physical bodies included—is waiting for the great redemption. It is, in a sense, a return to the Garden of Eden, a creation in which all is in harmony.

We see exactly such a picture proclaimed by the prophet Isaiah: “The wolf shall live with the lamb, the leopard shall lie down with the kid, the calf and the lion and the fatling together, and a little child shall lead them. The cow and the bear shall graze, their young shall lie down together; and the lion shall eat straw like the ox. . . . They shall not hurt or destroy on all my holy mountain; for the earth shall be full of the knowledge of the LORD as the waters cover the sea” (Isaiah 11:6-9).

The biblical view of salvation is this: we human beings are not separate from the rest of creation—including the animal kingdom. It’s all an interconnected and continuous web of creation. We are filled with and surrounded by living organisms and inorganic matter that are part of who we are. God loves it all. God sustains it all. And God will redeem it all.

I don’t know how and I don’t know when. But I am convinced that nothing separates us (and the rest of creation) from the love of God. The pattern of it all is always with and in God, and it will all be as God desires it to be.

Yes, all dogs go to heaven.

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Pelican Story

By J. Daniel Hess

Recently I took a week-long solitary retreat to the spit of sand called the Outer Banks of North Carolina. Well, to tell the truth, it wasn't solitary. My Canon PowerShot A80 went along with me.

The camera helped me to see. On the ocean side I and the camera had endless fun framing waves, pebbles and sanderlings. On the sound side, we hid among reeds to get close-ups of ducks at sunset. Of course we took photos of the five lighthouses along "the graveyard of the Atlantic."

But pelicans eluded us. I like to watch pelicans, those prehistoric water scoopers with the sac of a mouth. But pelicans don't want their pictures taken. They score a 10 on any dive, no matter the degree of difficulty, yet their hitting on a fish is too quick for the trigger. I also like their gliding in groups just four or five inches above the water, with an occasional uplift and several wing flaps, but usually they are too far from shore for good photos.

I gave up on pelicans and headed south to Pea Island where I came upon a beautiful sand dune. The clarity of contrast between the white sand and the blue sky moved me almost to tears. A simple yet profound coming together of two natural wonders, earth and sky. After admiring it for a spell, I lined up the perfect picture, that is, I blocked this beautiful painting—blue on white or white on blue. I focused my eyes riveted to the image on the camera, and then began to press the shutter button.

At that instant—I'm not making this up—three pelicans flew just a bit above the edge of the sand and into the very center of the frame.

The photograph is now in my office. I will never claim credit for setting up the shot because I didn't do it. I have a feeling, however, that my camera is saying to me, "Awaken! I'm ready for more of this when you are."

Editor's Note: See the color print of this photo in the church lobby.

Photograph by J. Daniel Hess

When much in the woods as a little girl, I was told that the snake would bite me, that I might pick a poisonous flower or goblins kidnap me, but I went along and met no one but angels so I haven't that confidence in fraud which many exercise.

—Emily Dickinson

Rufus

By Savannah Ahlgrim

A small animal is buried in his bedding. It is day time, but he is sleeping. At night, he will awaken and jump around his cage like a lunatic. On some nights, he will squeak until his owner wakes up because he is hungry. Then the owner will not be able to sleep because of all the racket the small critter makes.

This is how my chinchilla behaves. Loud, annoying, and irresistibly cute. His name is Rufus. It was not me that named him. His previous owner had named him, but she had to get rid of him because her fiancé had a dog. Rufus was seven years old when I got him. (They usually live to be 18-22 years old). Since the first time that I had seen a chinchilla at Uncle Bill's Pet Center, I had a great desire to have one of my very own. My favorite thing about Rufus is his curiosity. When I let him run free in my room, he races around, uncovering

every corner. He chews on everything and has taken a special liking to my social studies book. He hasn't overcome his shyness of me, so when I get near him, he hops away. Yes, he quite literally hops. That's just one more thing that makes him cute.

A chinchilla is mostly all good, but there are some disadvantages. The worst one is the smell. His cage reeks with the smell of rodents even when it's clean. I have a hard time enjoying sitting in my room now. Another thing is that he makes a lot of noise at night. This isn't too bad, though, because it's all a matter of just getting used to chinchillas. Other than that, Rufus is just plain cute. I would recommend getting a chinchilla to anyone who is up to an animal that takes responsibility.

City Chickens

By Isabel Kauffman

We have six chickens that are now all two years old. The chicken breeds are Araucana from South America, Brahma from India and Spitzhauben from Switzerland. We have no roosters because their crowing makes too much noise. The rooster that we had was served in the Thanksgiving dressing last year.

It's fun to hear the hens cluck to each other and watch them scratch around for bugs. I collect the eggs and feed them kitchen scraps. It's kind of hard to water them because their can is heavy. The worst thing about having chickens is keeping their area clean. I don't like stepping in chicken poop. We keep the chickens in a pen in the back yard. They go into a box in the garage to sleep and lay their eggs. In winter, heat tape wrapped around their metal watering can keeps their water thawed and a light bulb keeps them warm. The light also tricks them into laying more eggs in the winter. The eggs are very colorful—green, orange, white, brown, pink and with dots.

We ordered the chicks by mail from CackleHatchery.com. When we got them, they were about four inches tall. They felt fuzzy and warm. Our neighbors also decided to have chickens. There are now at least four families with chickens in our neighborhood. We like having fresh eggs for cooking!

Gabriel Kauffman holding a Brahma chicken.

Photograph by Gwen White

A Night to Remember

By Kenda Resler Friend

A hush fell over the stable on the cool, starlit night. The rich smell of hay permeated the air. The horses neighed and stomped their hooves in anticipation. Was this the stable in Bethlehem? Not exactly—this scene is the cozy barn on the outskirts of Goshen, Indiana, and home to some of my most cherished Christmas memories.

There always seemed to be snow on Christmas Eve at my childhood home, which made running to the barn even more exciting after returning home from a family celebration. Just as that long-ago stable held animals complete with their smells and noises which didn't bother the Christ child, this special barn smelled sweeter than roses to me. The whinnies of welcome as we opened the barn doors laden with jingle bells made my little sister and me feel like all was right with the world on those crisp Northern Indiana nights.

Skip, the trusty palomino; Teddy the dappled roan; Dandy, the feisty pony; Gallant, the pinto pony; and Squirt, the prize-winning mare always knew what their Christmas treats would be. Oatmeal cakes, carrots and apples made up the standard Christmas bounty and the pounding of their hooves on stall doors indicated continued enthusiasm for the treats at hand.

Being with our treasured animals on a sacred night always made my little sister and me stop and ponder what it must have been like for Mary and Joseph to spend the most important night of their lives in such a setting. Surely they appreciated the warmth that animals provided, just as we delighted in warming our hands under warm manes of furry ponies. The gentle sounds of hay rustling may have calmed

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the baby, just as these familiar noises calmed our minds after a bustling night of gifts and chatter. Perhaps the greatest feeling of all for Jesus' family came from knowing that God was truly present in such a humble setting. And we felt God's presence in our stable, too. As we tightly shut the barn doors and walked to the house in the calm, clear night, we looked up at the stars and could almost hear the angels singing, "Glory to God in the highest, and peace on earth."

Why I Watch Birds, *cont. from p. 1*

Golf Course, I looked up and saw a Baltimore oriole, a beautiful and increasingly rare sight. It made the ensuing triple bogey a bit less discouraging.

3. Birds can teach us nonviolent defense. The weaverbirds in Kenya build hundreds of flimsy little hanging basket-type decoy nests, all the way at the end of the branch. Rather than fight the snake off as it approaches the nest, they just laugh as it goes from one empty nest to the next, falling out of the tree each time.

4. Birds teach cooperation. Hundreds of cattle egrets, each with its own private Cape buffalo is an awesome sight.

5. Birds can teach us the big guy doesn't always win. I have seen a hawk being chased by a tiny bird not more than 25% of the size of the hawk. I am not sure what the inciting issue was, but clearly the small bird was winning.

And finally,

6. Watching birds teaches humility . . . because of the omnipresent squirrels. Squirrels are continually getting into my feeders. I have spent considerable time and effort in defeating these little rodents. I have been very proud of some of my more ingenious solutions, only to have Mary tell me at dinner that the squirrel defeated me once more.

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The Dog We Got

By Beth Lehman

Some dog breeds are famously produced for their calm dispositions—those big, yellow, calm, relaxed, happy dogs, tolerant of vast varieties of people. That is the kind of dog we decided on, just not the kind we got. Instead, we picked a darling mutt labeled a Spaniel mix, though it gave me a short pause when the dog adoption staffer chuckled and said that someone took the easy way out with that label since it really tells us almost nothing. At polite puppy class, she has been called by categories that are more distinctly fitting: “a pistol,” “a spitfire,” “too big for her britches” and “over the top.”

The reality of life with a puppy, compared to the expectations of life with a puppy has been a little startling to us all. “In commercials the puppies look so nice. I like the ones with bows,” Elsa noted wistfully one evening while defending her stuffed horses from the black and white blur zipping around the room. I, too, feel deceived by the cute dogs running through sprinklers with laughing children on TV and cuddled with kittens on greeting cards. But I am old enough to know better.

Bringing an animal into our home is a wild card, but that is the appeal of animals, they are not like us. They display surprising behavior, puzzle us, make us laugh. We wanted a puppy in part for her antics. But those puppy teeth make at least one of us in this house cry, and that brings out the mama bear in me. Those sharp little teeth nipping at my daughter’s skin push me to obsess if this little back and white cutie with the razor teeth and the wagging white-tipped tail really belongs in our den. It leads me to wonder, as if the knowing would change her behavior or our training strategies, just what is this wild little mutt?

She could turn into a snarling Chihuahua-Pit Bull Mix that lands us on the nightly news. She could grow into an oversized Pug-Boston Terrier Mix that draws laughter and pity at the playground. Looking at this dog now it seems that Beagle-Boston Terrier might be the best guess as to her mixed breeds, and I have spent a truly stunning amount of time searching for details of these breeds and the outcome of their crossing as if this information will fill in the mysterious gaps in understanding the behavior of this pup and her teeth. As if to know her lineage would confirm or deny if she is suitable to stay in my den with my family. If I really want to know, I can have her DNA tested, but I have not done that for fear she will somehow prove to be the kind of dog that does not belong with my child.

But just tonight Elsa was complimented by the polite puppy trainer for her excellent body posture in meeting all the class dogs. This five year old girl can get our pup in a head lock if it comes to that, and the dog lets her carry her around. Elsa named her Sparky after the dog in the Little People videos. When I asked Elsa why she thought God created dogs, she said, “I don’t know . . . they aren’t good for anything like cows. Not good for anything like horses.” Still, she likes having one, even though it is a nippy, crazy, pesky pup. It gets sleepy and cuddly sometimes, too, and fetches a ball. We’ll keep her in our den, whatever she is.

Mouse Ranching: *Whoopee Ki O, Get Along, Little Squeaky*

By John Hofstetter

Ranching is commonly understood as animal husbandry of cattle, horses or sheep. The word, although often applied to farming operations in the western United States and Canada, includes similar operations in South American, Africa, Middle East, Asian steppes and Australia. Ranching can also be raising emus, ostriches, bison, antelope, cameloids, crocodilians, etc. I am adding mice to this list.

What I do, along with my wife, two technicians, and help from the large Laboratory Animal Resource Center at Indiana University School of Medicine, resembles ranching in many ways. We raise very special mice. They are called *generations*. The result: every mouse of a given strain has exactly the same genes as every other one—like identical twins. This makes them ideal for genetic studies; unfortunately, it also makes them vulnerable. They cannot survive outside the highly controlled environment of a laboratory-animal room.

Each of our mice (more than 200 in 10 lines) is a unique, irreplaceable repository of special genetic combinations; ours are associated with behaviors. The way they react to particular circumstances mirrors those of patients with certain mental illnesses: alcoholism, bipolar disorder, schizophrenia, autism and obsessive-compulsive disorder. They are genetic models of psychiatric illness.

My mouse ranch is in one small room that we call the breeding room. Mice live together in many clear-plastic bins the size of a shoe-box with a wire lid. The lid is designed to hold a handful of chow (food) pellets and a watering bottle. Healthy adult mice can eat about a half-tablespoon of chow a day and drink over a thimbleful of water. About two cups of cedar-chip bedding and five mice fit comfortably into each bin.

At first, bins of breeding sets hold only three mice: one guy and two gals, until they have pups when, suddenly, there may be 20 mice in a cage. But a nest of pups (about ten) is not as big as one mouse and looks like a passel of squirmy pink gummy bears.

We have been ranching since 1994. (The lifespan of mice is only two years.) In that time we have tended over 8,000 head. We need a big computerized database to keep track of them. We do not use all of the mice for our studies alone; we share them with other researchers at Purdue University and Oregon Health Sciences University.

Every week all of the mice get what we call a change-out: a new bin, chow, bedding and water-bottle; everything done by the regulations. Any changes from the standard operating procedure must be approved by the Institutional Animal Care and Use Committee. For 200 mice, the weekly change-out can be very taxing (physically and environmentally) and time consuming, so we need help. To get the help, we pay for each bin of mice; rent is \$18 a month each bin. Ranching lots of mice is expensive.

Our many lines are of three types. Each type carries a tiny fraction of each of the following chromosomes: 1, 3 and 12. To make each type, we crossed (mated) a brown agouti mouse

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Bees

An Interview with Dino Martins

By Mary Liechty

Dino Martins is a Kenyan national who is presently a PhD student at Harvard University's zoology department and has a special interest in bees. He studied at Indiana University for his undergraduate work, and I knew him through mutual friends. The following is an email interview with Dino on the importance of bees.

Q: Why are bees so important to us?

A: Bees are among one of the most diverse and useful groups of creatures in the world. They include some of our most striking insects who are also important, efficient pollinators for large numbers of plants.

What's really mind-boggling is that there are thousands of wild bee species who seek their living through exploiting flowers for nectar and/or pollen resources. Virtually everyone is familiar with the honeybee (*Apis mellifera*), that universal mascot of the useful and helpful insect to humankind. Few are aware, however, that, in addition to honeybees, the grouping of bees called the Apoidea, is incredibly diverse. The Apoidea is a superfamily—encompassing all bees and hairy sphecoid wasps. East Africa, alone, is home to no less than several thousand species of bees. The Southwestern United States—a relatively dry area like East Africa—is also a hotspot of bee diversity.

In the seminal book, *The Bees of the World*, Charles D. Michener, one of the great figures of bee biology and taxonomy, estimates that there are about 16,000 bee species described in genera and sub-genera. With many species still being described and discovered, the total number of species is thought to be over 30,000!

Q: Why are bees disappearing?

A: Honeybees are currently disappearing at alarming rates. This has been termed 'colony collapse disorder' or 'mysterious bee vanishing.' There are a number of different factors that have been blamed for the reduction in honeybees. Several pesticides are being used more and more widely. These have a broad range of effects on bees, including affecting their ability to navigate—to find their way back to their hives. Bees are also suffering from diseases that have been spreading in North America. These include viral diseases and the infection of hives with parasitic mites. The mites are very bad for the bees; in fact, one of the main mites is called by the scientific name *Varroa destructor*!

Q: What does that disappearance mean for us?

A: The consequences are huge for us—especially in agriculture. No doubt most people are familiar with the importance of bees for pollination. Indeed, the greatest service and unrivalled role they play in nature is the essential process of pollination. In fact, the diversification of flowering plants, the Angiosperms, is closely matched in evolutionary terms with a corresponding diversification of bees. Both are thought to have originated deep in the heart of the ancient super-continent Gondwanaland, and, from there, spread across the rest of the world.

Bees make good pollinators for several reasons. First of all, they are totally dependent on floral resources (nectar and pollen) for food. This means that they have to make repeated visits to many different flowers. For the plants, therefore, the bees' dependence on floral resources is a perfect match—repeated and regular visits increase the reliability of

pollination events. Another reason for bee efficiency at pollination is the structure of their bodies. Bees are covered with plumose hairs. Hairy bodies are a perfect surface for pollen grains to adhere to in large numbers. This means that even brief visits to flowers by bees remove pollen in significant quantities.

As the bees move from flower to flower, the pollen is transported over varying distances. This ensures cross-pollination. Exchange of genetic material between different individuals of a single plant species is the healthier means of reproduction. Just as inbreeding in mammals causes many problems, plants also suffer from the effects of self-fertilization. The pollination systems that have co-evolved with bees are a way that immobile plants are able to 'mate' with individuals far away from themselves.

Without pollinating bees, many agricultural systems and ecosystems would face a dire future if there were no new seeds and fruits to feed other creatures (including us!) and replenish the world with new seeds and, therefore, seedlings.

Q: What can be done to save the bees?

A: You can start in your own garden and home. Don't use pesticides and other chemicals in your garden. Buy organic fruits and vegetables when and where you can and check to see what local farms might be doing for pollination. Many common plants such as blueberries, tomatoes, eggplant, watermelon and zucchini all need to be pollinated by bees. If you have a garden, you can plant native species in a corner for pollinators to visit.

Q: How did you get interested in bees? Did you have a special "bee experience" as a child?

A: I have had a long fascination with bees as pollinators because their behavior at flowers is so incredible and intricate. Bees are a way of bringing together the wonderful diversity of flowers and the intriguing and different behaviors of insects. I continue to study many aspects of them. I have just recently completed a study on the African Violet, a flower familiar to many people as a pot plant, but it originates in East Africa and is very rare in the wild. The flowers are pollinated in a special way by the bee holding them in its teeth and vibrating it at a particular frequency. Only then is pollen released. The flowers cannot be pollinated in the wild without their special bees.

Like all children, some of my earliest memories are of watching insects. Just like many children in the U.S. watch TV today, I used to get home from school and watch insects. (We did not have TV.) Often I would follow them for hours. I especially remember the big, fat carpenter bees that nested in the eaves of our house and would fly about noisily every day as they returned to their nests after a hard day's work.

Q: How are bees viewed by Africans?

A: Bees, especially honeybees, are very important and much-treasured by people in Africa. Many different communities keep bees for their honey and also as pollinators for crops. The association between bees and humans is very old and is depicted in ancient rock-paintings across Africa, and, more recently, in the frescoes of the Egyptians. Bees feature largely in folktales and sayings. There is a popular saying in Kiswahili, "Fuata nyuki, ule asali"—meaning, literally, "Follow the bee and you will get honey." This is calling on people to work hard, just like the bee does, so that they will reap the benefits of dedication.

Film Review

Turtles Can Fly

By Paul N. Hartman

As I looked for a movie about some endearing or innocent animals, the theme of this issue of *MennoExpressions* led me to a movie that is neither about animals nor about innocence. *Turtles Can Fly* is about killing, though, which animals often do to other animals, but rarely, if ever, for the complex reasons which motivate human beings in time of war. This movie is the first one filmed in Iraq since the American invasion of 2003. It takes place in a Kurdish refugee camp or village in Iraq, just weeks prior to the beginning of the war, at a place so close to the border with Turkey that, in one instance, the children of the camp can be seen taunting the border guards in the towers and the guards shooting at them in frustration and anger. The characters of interest in the movie are children, all of them orphans who live their own lives with a limited amount of interaction with adults, although there are adults in the camps and villages.

The main character is a twelve or thirteen-year-old boy nicknamed Satellite, who not only leads the children, but also is in many ways the leader of the adults as well. He is called Satellite because he has a technical savvy that allows him to purchase satellite dishes and hook up televisions for villagers to view international news channels, so that they can gain information about the war that they expect will soon commence. He leads the children by organizing teams of them to locate, disarm and collect landmines which can then be sold to nearby arms merchants. One boy named Hyenkov, also called The Boy with No Arms, is able to disarm landmines by pulling the firing pin with his teeth. The Boy with No Arms has a sister named Agrin, a child with a beautiful but weary countenance who has seen too much of this world's strife and pain. The two of them care for (or at least attempt to do so) a much younger child who appears to be a sibling, until we discover that he is the product of Agrin's rape by Iraqi soldiers, who also killed many members of her family.

As to whether this is an anti-war movie, you will have to watch it yourself given that there is no simple answer to the question. Prior to the war, the Kurds were looking forward to the American invasion as liberation from Saddam's repressive and violent rule. The Kurds have long been a stateless group feared and oppressed by many states in their area of the world. The movie was written and directed by Bahman Ghobadi, himself a Kurdish-Iranian. So if the movie is not an anti-war polemic, what is it? It is a story of how children live their daily lives in a world where war has been a constant fact of life for many years, for at least as long as the children can remember. Neither is the movie a dull rendering of death and meanness, as it might be if not for the brilliance of the filmmaker. Rather, there is humor, cleverness, beauty and the crushes that characterize the lives of children and adolescents. Of course, there is also tragedy and heartbreak, as this is inevitable with so much instability and unpredictability.

I have never cared very much for movies with subtitles, as it always seemed to me that much of the subtlety of the communication was lost in the translation. My guess is that many people feel the same as I do, as foreign language films often do not do well in the United States. But for some reason

that I cannot quite put my finger on, that did not really seem to be a problem with this movie. Perhaps it is because the action, the faces and the bodies are so expressive that the message is conveyed through these avenues more than through the words.

What I like most about this movie is that it is complex and subtle enough that it cannot be easily classified as portraying a liberal or conservative political viewpoint, in the American political context. One reason for this is that it was not made in America, nor was it made by Americans or primarily for Americans. Americans often don't remember that people in other countries have much different perspectives on the world than we do. This movie challenges us to try to understand and integrate with our worldview the perspectives of people with experiences much different than our own. The people in this movie are shown watching Fox News and CNN, and it is clear that they do not or have not had the constant 24 hour access to news channels that we are used to, nor are they accustomed to the barrage of the various media that we have here. Nevertheless, they do have their own sophistication and are heard to say that some of what they are watching is lies.

Mouse Ranching *cont. from page 6*

with a black mouse and selected pups from their litters that carried the genes from the brown strain that were in the exact place on the chromosome of the black mice that we wanted. Since the mouse lines are, in the main, black mice, if they act like the brown mouse, then those behaviors must be inherited with that bit of chromosome.

As an example of what we are trying to accomplish, chromosome 1 holds about 1,450 genes scattered along several feet of a single DNA molecule, not unlike beads on a necklace. The genes we are most interested in are among a few (50 or so) at one end of the chromosome. Of that 50, we need to find the specific gene making a behavioral difference in our model. Once found, it can tell us much about the underlying causes of the behavior and, hopefully, some reasons that similar behaviors show up in patients with mental illness.

Most people think mice are smelly pests. Without them, we could not do our work and learn about troubling diseases. I must admit—they are rather smelly and can make you sneeze—but I think they are cute.

Food for Thought

By Devon Miller

One Christmas tradition is to have some kind of pudding as part of the celebration. In Early English tradition, you have English Plum Pudding. In the carol, "We Wish You a Merry Christmas," we sing, "Now bring us a figgy pudding." Growing up in Northern Indiana, I always had date pudding. If you grew up in Central Indiana, you might be served a persimmon pudding. Our recipe this month is from a long-time friend, Frances Heavrin, who shares an easy corn pudding recipe.

Corn Pudding (Frances Heavrin)

1 can of cream corn
1 can of whole kernel corn
1 box Jiffy corn bread mix
¾ cup sugar
½ cup milk
2 sticks of butter—melted
4 beaten eggs
8 oz. carton of sour cream

Instructions: Mix all of the above ingredients in a bowl with a mixer (not high speed). When all mixed together, pour into a greased 9 x 13 glass or porcelain pan and bake at 350 degrees for approximately 70 minutes. Top will be golden brown. Can be served warm or cold. Cut into 1½ inch squares.