

Farmers, Scientists Seek to Learn From Nature

The Wired Word for the Week of June 21, 2026

In the News

Park Gyeong-je, 65, has been keeping bees in South Korea for nearly five decades. Over the years, as climate change has led to rising temperatures, strong winds and shorter seasons, he has faced new challenges. He used to make four trips across the country every year with over 100 hives that are home to about 8.8 million bees, chasing the black locust nectar his bees need, but now he only makes two such trips annually.

"In the past there were big climate differences between southern and central regions, so it was very good for producing honey. But now, because of global warming, flowers seem to bloom all at once nationwide," Park said. "Compared to the 1990s or early 2000s, the honey harvest has decreased by about 70%. In the past ... we harvested 8 to 9 times. Now we can only do so 4 to 5 times."

The honey harvest decline correlates with the loss of about 70% of acreage available for bees to forage in South Korea in roughly the same time

period, according to data from the National Institute of Forest Science. More than a third of the beekeeping farms ceased operation between 2005 and 2025.

Honeybees pollinate the majority of our crops and trees that supply oxygen, food, animal habitats and other resources necessary for survival. According to some estimates, without bees we could lose one-third of the food we eat.

On the other side of the world, 62-year-old Geraldo Gomes, an organic farmer and seed guardian in the semi-arid region of Caatinga, Brazil, saves more than 200 varieties of heirloom seeds, including more than 70 types of beans, many varieties of corn, and seeds of medicinal plants, in his seed house.

"We have species of seeds that have been planted for more than 100 years. We keep them to show the importance they have had, and the importance they may have for future generations," Gomes explains.

For three generations, the family has bucked the trend of nearby livestock and cotton monoculture farms which employ pesticides and chemical fertilizers. Gomes says these factors, along with climate change, have contributed to economic hardship for many local farmers and the loss of many native plants.

The Gomes farm is home to a diverse array of crops. His grandfather always maintained that "a field should be like the forest, it has to

have many types of plants. "

"If you do not have a lot of patience and love for the seeds, you end up giving up," Gomes says about his devotion to seed preservation. "There are few incentives and few people who are interested in this work. [But] I look at the benefits you can gain from what you plant. It is a guarantee in the face of these difficulties ... We saved them so we would not be dependent."

Meanwhile, the U.S. federal government is dismantling more than 900 sophisticated deep-sea instruments off the Pacific and Atlantic coasts that have monitored oceanic currents and surface and underwater conditions 24/7 for the past decade. In 2025, the Trump administration indicated it planned to cut the budget for the Ocean Observatories Initiative (OOI), which was originally meant to operate for 25-30 years, by 80%. The National Science Foundation spokesperson Mike England said the agency remains committed to ocean science.

The loss of the OOI instruments removes data about wave height and frequency, water temperature and chemistry, shifts in circulation, and seismic activity on which fisheries, meteorologists and other scientists rely for accurate weather predictions and insight into the pace of climate change and the health of marine ecosystems.

"Ocean observing systems ... are like our eyes and ears in the water," says Rebecca Helm, a marine biologist at

Georgetown University.

"If you are driving your car and you're relying on signs to direct you to where you want to go, it's like taking out every other highway sign. So, you can imagine you're going to miss some key information," said University of Washington oceanographer Jan Newton.

More on this story can be found at these links:

[A South Korean Beekeeper Counts the Cost of Climate Change. Reuters](#)

[The Seed Guardian of Brazil's Caatinga. GlobalVoices](#)

[Trump Administration Takes Aim at Crucial Ocean Monitoring Network. Scientific American](#)

[Ocean Observatories Go Dark Off Pacific Northwest Coast. KUOW/NPR](#)

Applying the News Story

Use the news to consider how we know what we know, how we gain understanding, and how we can apply what we learn to care for creation.

The Big Questions

- 1. What might motivate people to explore or examine the natural world?**
- 2. What can we learn from studying nature? What is the greatest lesson you have learned, about God, yourself, or life, from observing creation?**
- 3. What might we miss when we fail to pay attention to the created world?**

4. When, if ever, have you felt that your skills, gifts and efforts are too small to make much of a difference in the world? How might lessons learned from honeybees or seeds change your perspective?

5. What practical steps can we take to learn how to be better stewards of the Earth and everything in it?

Confronting the News With Scripture and Hope

Here are some Bible verses to guide your discussion:

Proverbs 1:7, 20-22

The fear of the LORD is the beginning of knowledge; fools despise wisdom and instruction. ... Wisdom cries out in the street; in the squares she raises her voice. At the busiest corner she cries out; at the entrance of the city gates she speaks: "How long, O simple ones, will you love being simple? How long will scoffers delight in their scoffing and fools hate knowledge?" (For context, read [Proverbs 1:1-7, 20-33.](#))

The Teacher urges the hearer to pursue knowledge, understanding, learning and wisdom, in order to gain skill, prudence, discernment and the ability to deal justly with people. That is the path to security. Calamity will befall those who despise and ignore wise counsel and refuse to accept correction. Later, in their distress, when they crave wisdom, they will not find it.

Questions: Where do you see wisdom crying out and raising her voice to be heard today, only to be

ignored? Why do people "love being simple" and "delight in ... scoffing"? What do we risk when we adopt that attitude?

Job 12:7-10

[Job said,] "But ask the animals, and they will teach you; the birds of the air, and they will tell you; ask the plants of the earth, and they will teach you; and the fish of the sea will declare to you. Who among all these does not know that the hand of the LORD has done this? In his hand is the life of every living thing and the breath of every human being." (For context, read [Job 12:7-13.](#))

According to legend, the wizard Merlin prepared the boy Arthur to be a good king by turning him into animals such as a fish, hawk, ant, goose and badger. Author Benjamin Hoff wrote: "Lots of people talk to animals. Not very many listen, though. That's the problem."

In our text, Job indicates that humans could learn a thing or two from plants and animals. The prophet Balaam is a case in point. When he disobeyed God and headed out to see an enemy of God's people, Balaam's donkey saw an angel blocking the road and turned aside, but Balaam was blind to the angelic presence. He began beating the beast in anger, until finally "the LORD opened the mouth of the donkey," who asked why he was abusing her. It wasn't until God opened Balaam's eyes to see what the donkey saw that the prophet understood that he wasn't as smart as he thought he was

(Numbers 22:22-35).

Questions: If you could talk to one animal, which would you choose, and what one question would you like to ask? What do you think animals "know" that humans may not see or may have forgotten?

John 9:25, 29-33

[The man who had been healed] answered, "I do not know whether he is a sinner. One thing I do know, that though I was blind, now I see." ...

[They said,] "We know that God has spoken to Moses, but as for this man, we do not know where he comes from." The man answered, "Here is an astonishing thing! You do not know where he comes from, yet he opened my eyes. We know that God does not listen to sinners, but he does listen to one who worships him and obeys his will. Never since the world began has it been heard that anyone opened the eyes of a person born blind. If this man were not from God, he could do nothing." (For context, read [John 9:1-41](#).)

This chapter records a Sabbath-day incident when Jesus healed a man who had been born blind. The Pharisees couldn't decide whether Jesus was a sinner, because he did a work of healing on the Sabbath when working was forbidden, or whether he came from God, because he healed a man who had been born blind. Their conversation with the healed man is all about what they knew about Jesus, and how they knew it.

The Pharisees said they knew Jesus

was a sinner (v. 24), and that they knew God had spoken to Moses, but they did not know where Jesus came from (from which we can deduce that they mean they did not know whether God had spoken to Jesus). The healed man replied that he couldn't say whether Jesus was a sinner, but he knew one thing for sure: Once he was blind, and now he could see! He said it was common knowledge that God doesn't listen to sinners, but he does listen to one who worships him and obeys his will. He came to a different conclusion, that Jesus had to be from God.

Questions: On what basis did the Pharisees reach their conclusions about Jesus? On what basis did the healed man reach his conclusions? How do we know that what we believe (about Jesus, or about anything else, for that matter) is true or false? On what should we base our conclusions and decisions?

Matthew 8:23-27

And when he got into the boat, his disciples followed him. A windstorm suddenly arose on the sea, so great that the boat was being swamped by the waves, but he was asleep. And they went and woke him up, saying, "Lord, save us! We are perishing!" And he said to them, "Why are you afraid, you of little faith?" Then he got up and rebuked the winds and the sea, and there was a dead calm. They were amazed, saying, "What sort of man is this, that even the winds and the sea obey him?" (No context needed.)

The psalmist tells us that mariners who "went down to the sea in ships, doing business on the mighty waters; ... saw the deeds of the LORD, his wondrous works in the deep." When they were caught in gale-force winds, fearing the worst, "they cried to the LORD in their trouble, and he brought them out from their distress; he made the storm be still, and the waves of the sea were hushed" ([Psalm 107:23-30](#)).

Perhaps the disciples recalled this text when a windstorm threatened to capsize their boat in the incident recorded by Matthew. Or they may have been thinking of other Scriptures, which depict God as the creator and owner of the sea ([Psalm 95:5](#)), who is "more majestic than the thunders of mighty waters, more majestic than the waves of the sea" ([Psalm 93:4](#)), who dries up the sea by his rebuke ([Isaiah 50:2](#); [Nahum 1:4](#)), and rules "the raging of the sea" and stills the rising waves ([Psalm 89:9](#)). Is it any wonder that they asked "what sort of man" Jesus could be, "that even the winds and the sea obey him"?

On another occasion, the disciples saw Jesus walking on the sea ([Matthew 14:22-26](#)), demonstrating his authority over the physical world.

Questions: When have you seen God calm the winds and the waves in history? In your life?

For Further Discussion

1. How might Geraldo Gomes' intentional planting of diverse seeds,

rather than following a monocultural model of farming, serve as a metaphor for different ways of organizing human societies? Would God favor one approach over the other, in agriculture or in human relations? On what do you base your opinion?

2. The world's largest collection of agricultural biodiversity, the [Svalbard Global Seed Vault](#), was opened by the Norwegian government in February 2008. It contains seed samples of 1,385,898 varieties of food crops, including more than 250,000 types of wheat, 160,000 types of rice, and 46,000 types of maize. According to the SGSV website, seed diversity is vital for humanity's "ability to adapt crop production to the climate, local growing conditions and consumers' eating habits."

Is storage of seeds the ultimate purpose of the seed vault? For what type of scenario was the seed vault established? Consider how our hearts might become seed vaults for the seed of God's Word. Is the storage of the seed of God's Word the ultimate goal? Why or why not?

3. Discuss this essay on [The Miracle of Seeds](#), by Martha Hamilton, who wrote: "Recently, I have been pondering the archetype of seed. ... at the core of each seed is a spark of life. The evident pattern of planting, emerging, growth, harvest and planting is repeated again and again and again in multiple applications of expression. ... With honor and

gratitude for the gift of the seed, we hold what has been given tenderly, as a treasure. There is dignity and value and worth in every single seed. ... Each one of us is a seed that has been planted. We are the harvest. Love is the gift, and we are the ones who sow the gift. The choice is always ours to broadcast love. We certainly have an excellent example through the wisdom of nature unfolding before our eyes."

4. Consider how much bees accomplish, with brains the size of poppy seeds or sesame seeds. Beekeeper Kristen Bell is impressed by the bees' commitment to the common good of the hive. "Every creature in the beehive is working for the success of that colony," she said. "I think God is telling us that we are to be doing the same thing."

The maxims in [Proverbs 30:24-30](#) teach us about other animals, but they can also give us insight into human behavior. According to the text, what specific wisdom do ants possess? Badgers? Locusts? A lizard? Taken together, what overall lesson can we learn from the weak, powerless, leaderless and small creatures in the text? How can people who feel weak, powerless, leaderless and small gain hope and courage by observing creatures like these?

Responding to the News

- 1. You may want to take [a virtual tour of Norway's seed vault](#).*
- 2. Create a pollinator garden, planting*

milkweed, goldenrod and asters in particular. You can also educate yourself about conservation efforts through the National Wildlife Federation and similar organizations.

Prayer

Creator God, we are amazed by the beauty, diversity and complexity of the universe you made. All aspects of creation, and all creatures, great and small, reflect your glory. Open our eyes to the lessons you want us to learn from nature. Amen.