



SCIENCE MATTERS

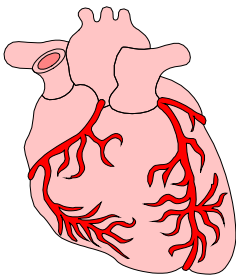
Science Partners Newsletter

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The Human Heart – By Design



The human heart is the focus of Valentine's Day. Here are some interesting facts about our heart and circulatory system that were designed by our Creator to provide us with "abundant life." (Selections from *Body By Design*, by Alan L. Gillen.)

- ♥ The human body has over 60,000 miles of blood vessels – that's 2½ times the distance around the Earth's equator!
- ♥ The heart beats an average of 70 times per minute. That's 4,200 beats per hour or 100,800 beats per day – nonstop – for the rest of your life!
- ♥ The heart pumps about 2,000 gallons of blood each day for a total of over 700,000 gallons each year! To accomplish this, chambers of the heart must contract and relax on a highly coordinated series of actions.
- ♥ The circulatory system even has a method of clotting in case a rupture occurs that might cause blood loss. Imagine a punctured bicycle tire repairing and re-inflating itself without your even knowing it!
- ♥ Red blood cells bathe every other cell in the body with fresh oxygen from the lungs and carry away harmful carbon dioxide gas to be expelled by the lungs.

**Isn't God awesome to create such an incredible thing as the human heart!
Have you given Him yours?**

Happy Valentine's Day!

A friend **loveth** at all times. Proverbs 17:17

Greater **love** hath no man than this,
that a man lay down his life for his friends. John 15:13

For God so **loved** the world,
that He gave His only begotten Son,
that whosoever believeth in Him should not perish,
but have everlasting life. John 3:16

My little children, let us not **love** in word, neither in tongue;
but in deed and in truth. 1 John 3:18

John 13:35
By this shall all
men know that ye
are my disciples, if
ye have love one to
another.

Join an Upcoming “OPEN” Creation Adventure:

Manatee Snorkel Encounter: Friday, March 15, 2024



Join the Cliftons as we **focus on “Florida’s Gentle Giant” - the West Indian Manatee**. Our destination is Crystal River on *Florida’s Nature Coast*. In the morning, outfitted with **wetsuits, snorkels, masks, and fins**, we will **take a pontoon boat ride in search of manatees**. When we find them, we’ll join them in the crystal clear, spring-fed waters – the only place in Florida where it is legal to swim with manatees! During our **manatee encounter**, we’ll observe these sociable, threatened mammals “up close and personal.” We’ll study them in their natural habitat, learn what threatens their survival, and find out how we can help.



After our picnic lunch we’ll tour **Homosassa Springs State Wildlife State Park**. This 166-acre park, located at the headwater of the Homosassa River, is a **showcase for native Florida wildlife**. We’ll visit the **Discovery Center** and also see many examples of Florida wildlife, some endangered or threatened. We’ll take the **“Wildlife Walk”** through natural wildlife habitats, keeping an eye out for alligators, snakes, deer, Florida black bear, bobcats, otter, Florida panthers, manatees (underwater viewing), and a variety of birds including endangered whooping cranes.

Deadline for minimum number is Friday, February 16. For information / registration form, click here: <https://www.sciencepartners.net/uploads/9/8/8/0/9880494/2024 - 03-15 manatee snorkel encounter.pdf>

Florida’s Water Systems: Friday, April 26, 2024

Come enjoy the great outdoors of Florida with the Cliftons! They’ll lead our group from Canaveral National Seashore to Merritt Island National Wildlife Refuge, the Indian River Lagoon, and the St. Johns River, exploring Florida’s Water Systems from the perspective of God’s design in creation.

At Canaveral National Seashore, we’ll begin with an orientation, beach walk, and sea bean hunt at this saltwater ecosystem. Then, we’re off to **Merritt Island National Wildlife Refuge Visitor Center, where we’ll look at their educational displays and see a film on the ecology of the area.** After lunch, we will **get into the brackish water of the Indian River Lagoon with seining nets.** Our



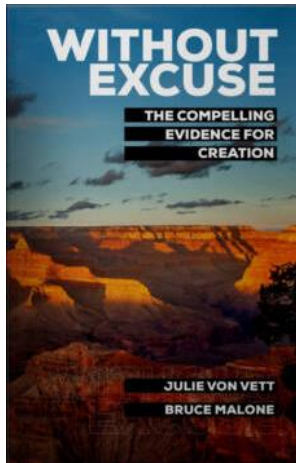
Capture and Release permit allows us to study the marine specimens we catch in our nets and then return them to the water. We never know what we might find, but have caught fish, shrimp, crabs, seahorses, jellyfish, puffer fish, horseshoe crabs, stingrays, and more! Sometimes we see dolphins and manatees. Our last stop is the **St. Johns River where we’ll observe the plant and animal life of this freshwater habitat from an airboat!** Watch for alligators, bald eagles, many other birds, turtles, and more! There’s an awesome gift and snack shop at the airboat place.



Deadline for minimum number is Friday, March 29. For an information / registration form, click here: <https://www.sciencepartners.net/uploads/9/8/8/0/9880494/2024 - 04-26 floridas water systems.pdf>

Without Excuse: Evidence from History – Were Neanderthals Dumb?

The Compelling Evidence for Creation



Were Neanderthals dumb? Scientists studying the teeth of Neanderthals from Belgium and Spain have decided that these guys were pretty smart! Paleoanthropologists were studying the stuff that clings to teeth, called plaque. Dental plaque hardens into tartar if not brushed. As tartar accumulates, it stores information about our diets. It was determined that Neanderthals from the Spy Cave in Belgium mainly subsisted on woolly rhinoceros, wild sheep, and wild mushrooms. A Neanderthal from the El Sidron cave in Spain showed the individual suffered from a dental abscess on his jawbone and had an intestinal parasite (microsporidian) which causes severe diarrhea.

So, what did the tartar show that this individual ate? He had a steady diet of mushrooms and plants, including poplar (*Populus* sp.). Poplar bark contains salicylic acid, the active ingredient found in aspirin. He was also eating plants covered in *Penicillium* mold, which is an antibiotic. Noted the researchers, “We’ve got a guy self-medicating...He is eating aspirin (poplar bark) and we’re finding penicillin in him.”



Dumb Neanderthals? Hardly! Neanderthals were fully human descendants of Noah and his family and not some half man – half ape transitional creature.

Then God said, “Let Us make man in Our image, in Our likeness... Genesis 1:26

Note: This daily devotion was taken from the book, “*Without Excuse*” by Julie Von Vett (a homeschooling mom teaching creation science to homeschoolers since 2003) and Bruce Malone, and published by *Search for the Truth Ministries*. It offers awesome evidence, primarily scientific – yet easily understandable, for the existence of a Creator. Arranged in an enjoyable daily devotional format, each provides yet another reason to trust God’s Word. It is organized into different subject areas: age of creation, anatomy, astronomy, biology, botany, design, flood geology, genetics, history, and truth. There are also 42 YouTube video links spaced throughout the book that are wonderful visual reinforcements for parents and teachers sharing the creation science concepts with students. We highly recommend this book, and are using it as part of our daily devotions. To purchase your own copy, go to <https://searchforthetruth.net/store/>.

Great Backyard Bird Count: February 16-19, 2024

Launched in 1998 by the Cornell Lab of Ornithology and National Audubon Society, the **Great Backyard Bird Count** was the first online citizen-science project to collect data on wild birds and to display results in near real-time. Now, hundreds of thousands of people of all ages and walks of life worldwide join the four-day count each February to create an annual snapshot of the distribution and abundance of birds.



You’re invited to participate! For at least 15 minutes on one or more days of the count, **February 16-19**, simply tally the numbers and kinds of birds you see. You can count from any location, anywhere in the world, for as long as you wish!

If you’re new to the count, or have not participated since before the 2013 merger with eBird, you must [create a free online account](#) to enter your checklists. If you already have an account, just use the same login name and password. If you have already participated in another Cornell Lab citizen-science project, you can use your existing login information, too. To get started, click here: <https://www.birdcount.org/participate/>.

In 2023, Great Backyard Bird Count participants in more than 253 regions throughout the world counted more than 7,732 species of birds on more than 334,700 checklists! During the count, you can explore what others are seeing in your area or around the world. Share your bird photos by entering the photo contest, or enjoy images pouring in from across the globe. You can even add photos and sounds to your checklist. Your help is needed every year to make the GBBC successful! <https://www.birdcount.org/>.

Then [keep counting throughout the year with eBird](#), which uses the same system as the Great Backyard Bird Count to collect, store, and display data any time, all the time.

Plan a CREATION ADVENTURE for Your Group!

Join the Cliftons as we take a hike, snorkel with manatees, ride an airboat, go beachcombing, seine in a lagoon, go birding, earn a birding certificate, see the heavens in a portable planetarium, learn about bears, bugs, dinosaurs, marine science, Noah's ark, and much more!

To Schedule Your Creation Field Trip or Workshop:

1. Go to www.sciencepartners.net. Click on the “**Creation Field Trips**” and “**Creation Workshops**” tabs to review the field trips and workshops that we offer.
2. Go to the “**Calendar**” tab to check on available dates.
3. Once you've decided on an event and a date, contact us so we can begin contacting our vendors and making reservations.
4. Once everything is confirmed, we will contact you, and your event will be added to our website calendar. For homeschool families, a registration form will be linked to your event date (unless your event is “closed” for your group only). Christian school classes do not need a registration form for each participant.



Our goal is to provide participants with a unique and fascinating creationist perspective of God's great design in nature and to teach them how to see God's handiwork in all of creation!