

## Weekly Lenten Calendar 2021 The Nyadire Connection Engineers Without Borders



Checking battery for solar light.



Solar Light

In the United States, we use electricity or natural gas to light our cooktops and ovens. Did you know that you can also use animal waste for fuel to heat a stove?? This converted fuel is called bio gas.

Sunday 4/18	Monday 4/19	Tuesday 4/20	Wednesday 4/21	Thursday 4/22	Friday 4/23	Saturday 4/24
<p><b>Pray for creativity and knowledge to solve energy problems.</b></p>	<p><b>Give 25¢ if you can name 5 things your family recycles. Give 50¢ if you can't.</b></p> <p><i>In Nyadire there is no formal recycling. They repurpose items for their own use. Have less packaged foods than in USA.</i></p>	<p><b>Do you have a gas or electric stove? Give 25¢ if you know, 50¢ if you don't.</b></p> <p><i>At Nyadire most cook over open fire.</i></p>	<p><b>If your family has a compost pile in their yard give 25¢. If they don't give 50¢</b></p> <p><i>Nyadire uses animal waste as a common fertilizer.</i></p>	<p><b>Give 35¢ if you have ever seen a solar panel on the roof of a house.</b></p> <p><i>Solar is becoming popular in Zimbabwe. Nyadire pumps water with solar, powers part of hospital and heats HOH water. Solar panels are very visible.</i></p>	<p><b>Give 50¢ if you have a microwave oven.</b></p> <p><i>Nyadire has no microwave ovens.</i></p>	<p><b>Give 10¢ (up to \$1) for every light you have in your yard.</b></p> <p><i>CMU students installed solar lights at Nyadire so the roads are brighter at night</i></p>

Bio Gas is created by collecting animal manure, food waste and other organic materials and regularly feeding them into a container that is sealed and without oxygen (the lack of oxygen is called "anaerobic"). Bacteria breaks down the organic material and creates methane, carbon dioxide and other gases which can be drawn into the stove for cooking. This is an alternative to more expensive or unavailable energy sources, especially in developing countries.

Students from Carnegie Mellon University's Engineers Without Borders (EWB) have traveled to Nyadire with TNC in order to investigate turning cow manure into bio gas for cooking at the Primary School. The student group has already installed solar (energy from the sun) lighting for the mission's dirt roads. The students are studying to become engineers (someone who relies on math and science to solve problems and build things).

Partnership with the student EWB is another way in which TNC connects to organizations in the community to help improve living conditions at Nyadire. Leaders in Nyadire identify needs, such as a need to move away from burning wood for cooking fires, and TNC helps to find a solution. Nyadire must provide 5% of the funds and commit to sustainability of the project. The EWB students raise funds to cover the cost of travel to Zimbabwe and for the implementation of their plans. Nyadire benefits from the knowledge and labor of the students; while the students gain invaluable cultural and practical experience.

Students are waiting on studies to be completed to see just how much cow manure can be collected on the mission in order to purchase the correct-sized digester (the masonry structure that turns manure into gas). Their goal is to install the digester and Primary School Cooking System by fall, 2021 if circumstances allow.

You can learn more about creating bio gas on this government website:

<https://www.epa.gov/agstar/how-does-anaerobic-digestion-work>

You can learn a bit more about the street solar lights at this site:

<https://cmellon.scalefunder.com/cfund/project/12023>

Meet the students leading the Bio Gas project here: <https://www.youtube.com/watch?reload=9&v=183HyroR9LI>



**TATENDA!**





## Weekly Lenten Calendar 2021 The Nyadire Connection Volunteers In Mission



Each year, TNC organizes several mission trips to The Nyadire United Methodist Mission. By doing so, we offer assistance to our friends there, and we provide opportunities for our volunteers to grow spiritually by serving God, helping others and learning from the relationships we have built with the people of Zimbabwe.

Sunday 4/25	Monday 4/26	Tuesday 4/27	Wednesday 4/28	Thursday 4/29	Friday 4/30	Saturday 5/1
<p><b>Give thanks and praise for the friendships formed and the cultures shared between the volunteers and the Zimbabweans.</b></p>	<p><b>Give 10¢ (up to \$1) for every time you have seen snow this year.</b></p> <p><i>Most Zimbabwean have never seen snow.</i></p>	<p><b>Give 25¢ if you have ever gone to a movie theater.</b></p> <p><i>There are no movie theaters in Nyadire. Zimbabwean kids rarely if ever go to the movies.</i></p>	<p><b>Give 25¢ if you have you ever traveled more than 50 miles from home.</b></p> <p><i>VIM volunteers traveled 8,400 miles to get to Zimbabwe.</i></p>	<p><b>Give 5¢ (up to \$1) for every television station on your TV.</b></p> <p><i>Zimbabwe has about 4 stations.</i></p>	<p><b>Give 25¢ if you know someone who was not born in the USA.</b></p> <p><i>Those born in Nyadire are born in the country of Zimbabwe and the continent of Africa.</i></p>	<p><b>Give 10¢ if you have volunteered to help at school or home this week.</b></p> <p><i>Nyadire Kids have chores before and after school.</i></p>

**VOLUNTEERS IN MISSION...** The Nyadire Mission is a rural complex located in the Northeastern region of Zimbabwe; it has a hospital, school, orphanage, nursing school, teachers college, church, and farm.

TNC has been leading large group teams since 2006, with some of our leaders traveling to Nyadire since 2002. Nyadire is a safe, secure community that loves our visits. As TNC is an all-volunteer organization, travelers pay their own costs, which range from \$2,000 to \$3,000 for air fare, lodging, transportation, food, and other fees. Volunteers stay in clean brick houses with beds, bathrooms, occasional running water, spotty electricity, and new friends! Teams eat together in a main dining room with typical Zimbabwean food prepared by nurses from the hospital who care for us during our stay.

**WHAT WE DO...** Prior to each trip, we meet for planning and training sessions, and we coordinate with the leaders in Nyadire. Our volunteers don't need to have special skills, and we always adapt our trips and projects to fit the abilities and interests of our team with the needs of the Nyadire Mission. Volunteers may be reading with a child, participating in a pastor's workshop, or assisting with maintenance and other work projects. We spend time with orphans; volunteer at the hospital; work with pastors in the area; work with teachers; and, if we're there in August, conduct a Vacation Bible School. We are normally able to find appropriate activities for people with special skills such as construction, medicine, education and theology. We purposefully work only on projects that Nyadire identifies as important so that the local folks have ownership of projects and activities. During each trip, we are very focused on developing relationships and volunteers are encouraged to visit neighbors, make friends, and get to know the community. We also have daily devotions as a group.

**How YOU CAN HELP...** For a life-changing experience, consider joining us for a Volunteers In Mission trip. Nothing provides more understanding and passion for the people than being there. Not only will you contribute and help, you can also expect an enriching and spiritual experience. TNC offers a variety of ways you can support or join our Volunteer In Mission program:

- Commit to taking a trip yourself
- Organize an activity or project for the group
- Help our travelers pack extra suitcases full of vital supplies for our friends in Nyadire
- Attend a training or information session

Click on this link for a short video highlighting the experiences (with lots of great photos of the HOH kids!) of three young travelers to Nyadire. Maybe you'll want to visit Nyadire someday!

<https://vimeo.com/252203577/d75f2a6a3b>

To learn more about a mission trip to Nyadire, please email Molly Michael at [mollyalice.michael@gmail.com](mailto:mollyalice.michael@gmail.com)



**TATENDA**