EDITION 2 - 2026

CCE NEWS

Since 1989

CENTRE FOR CONSERVATION EDUCATION

WHO WE ARE:

The CCE is a WCED (Western Cape Education Department) Institution, dedicated to the teaching of environmental awareness and South African heritage.

WCED MORAL VALUE: RESILIENCE

Resilience is the strength to withstand a storm and the wisdom to adapt to a changing world. In the face of "The Cape of Storms," we see that our safety is woven together with the health of our rivers and mountains. We practice resilience when we protect our wetlands and clear away the invasive plants that weaken our soil. You act with this value every time you plant indigenous flora or protect a local waterway, helping nature find its balance so it can, in turn, protect us. It is about realizing that we are not separate from the environment; we are a part of it. By working with nature instead of against it, we ensure that our landscapes—and our communities—remain standing long after the clouds have cleared.

"Nature does not hurry, yet everything is accomplished."

OUR LESSONS:

Climate Change; The Weather Station; Water Awareness; Biodiversity of Fynbos and Wetlands; Rocky Seashore Study; The Liesbeek as a River Study; The Trees of Arderne Gardens (Arbor Week); Cape Floral Kingdom Study; Groot Constantia: Cellar Tour & Viticulture; Groot Constantia as a Heritage Site; Slavery at Groot Constantia; Archaeology; Make a Museum Display; Children's Games: Change and Continuity; When Great-Granny/Grandpa was at School.

WHAT'S NEW?

STAFF EXCURSION:

CCE VISITS GENADENDAL



To close Term 3, the CCE team took a historical staff trip to Genadendal for an insightful tour led by Mr Samuel Baatjies.

FAST FACTS ABOUT GENADENDAL:

- **First Mission & Teachers' College:** Founded in **1738** by Moravian missionary **George Schmidt**, it became Southern Africa's first **mission station** and later established the country's first **Teachers' Training College** in **1838**.
- **Presidential Connection:** Nelson Mandela was so inspired by Genadendal's history of harmony and education that he renamed the **Official Presidential Residence in Cape Town** (formerly Westbrooke) "Genadendal."
- **Cape Town's Second City:** By the early 1800's, Genadendal grew into the **second-largest settlement in the Cape Colony**, serving as a major hub for printing, trade, and craftsmanship.



CAPE OF STORMS

TALES OF THE CAPE: FROM *TORMENTAS* TO *GOOD HOPE*


Bartholomeu Dias

Fierce weather has actually shaped Cape Town's history for centuries! Way back in 1488, the famous Portuguese explorer **Bartholomeu Dias** became the first European to sail around our peninsula. Because his ships struggled against such violent winds and terrifying waves, he originally named the peninsula ***Cabo das Tormentas***—the **Cape of Storms**. However, King John II of Portugal knew how important this route was, as it finally opened up a sea trade route from Europe all the way to India. To make it sound far more welcoming to future sailors, the Portuguese king officially changed the name to *Cabo da Boa Esperança*—the Cape of Good Hope. This new name celebrated the great optimism and "good hope" that sailors could now successfully navigate the treacherous waters to reach the riches of the East and return home safe and sound.

SECRETS OF THE SUNKEN PAST: SECRETS OF MARITIME ARCHAEOLOGY


Bredasdorp Shipwreck Museum

Long before weather satellites, treacherous gales and reefs earned our coast the name "Graveyard of Ships." Over 500 years, an estimated **3 000 shipwrecks** met their end along our coastline—with nearly 1 000 off the Cape Peninsula alone!

Resting on the seabed are sunken time capsules ranging from 500-year-old Portuguese caravels to 18th-century trading vessels.

Uncovering these secrets is the work of **maritime archaeologists**—specialists who dive deep to map wreck sites and recover history. A famous local discovery is the ***São José-Paquete d'Africa***, an 18th-century slave ship lost off Clifton in 1794, where divers brought iron ballast and artefacts back to the surface. To see these incredible deep-sea treasures in person, visit the **Bredasdorp Shipwreck Museum**!

THE WILD WEATHER OF 2026: FROM BIG FLOODS TO BIG HEAT

Have you noticed how unpredictable our weather has been this year? Severe storm systems slammed into Cape Town and across the Western Cape, leaving behind nearly **R10 billion worth of damage** to our province.

The government is currently managing a massive **recovery effort**, spending roughly **R2 billion** just to repair over **230 damaged roads**, **washed-away bridges, and public structures.** Most importantly, these fierce storms impacted over **22 000 homes**, leaving thousands of local families picking up the pieces and rebuilding their shelter.


Clicks, Main Road, Claremont

THE SEVEN-YEAR CYCLE: PREPARING FOR A SUPER EL NIÑO



WHAT IS EL NIÑO?

Imagine the **Pacific Ocean** as a giant bathtub. Normally, strong trade winds blow from east to west, pushing warm water toward Asia and leaving cool water behind. But about once **every 7 years**, those trade winds weaken—or even **flip and blow in the opposite direction**! This lets a massive layer of **warm water flood back across the ocean** surface, acting like a giant heater that throws global weather completely out of balance.

Scientists call this event **El Niño** (Spanish for "**the little boy**"). Depending on where you live on Earth, El Niño can trigger **extreme, destructive flooding** in some regions while causing **severe heatwaves and long droughts** in others—like here in South Africa!

WHAT TO EXPECT: A SUPER EL NIÑO



In South Africa, El Niño acts like a giant weather switch—swapping heavy rains for **scorching droughts**. We've faced strong El Niño events before, such as in **1982–83**, **1997–98**, and **2015–16**, which brought severe heatwaves, dried-up rivers, and ruined crops.

So why are experts warning that this upcoming one could be a record-breaking "Super El Niño"? Because ocean temperatures are already warmer than ever recorded. When El Niño hits an **already warming planet**, it unleashes **unprecedented heat**—making this predicted cycle the hottest and driest yet! This leaves us with a giant weather puzzle: rebuilding after massive floods while preparing for extreme heat and water shortages!

HOW YOU CAN HELP?

BE A WATER WARRIOR: Extreme heat means water will become scarce, but we can protect our environment!



- **Save Every Drop:** Turn off taps while brushing or soaping, and water plants with leftover drinking bottle water.
- **Protect the Soil:** Spread dry leaves or bark around garden plants (mulching) so the soil holds onto moisture longer.
- **Look Out for Wildlife:** Leave small, shaded bowls of fresh water in your garden or schoolyard for birds and insects struggling in the heat.

🔊 BRING YOUR CLASS!



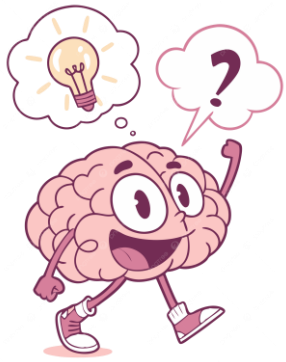


UNCOVER THE PAST, DECODE THE PRESENT, SHAPE THE FUTURE!

Bring history and environmental science to life at the CCE! Step into the shoes of a scientist as your learners dig up submerged history in our **Archaeology** lesson, decode real-time meteorological patterns with hands-on instruments at **The Weather Station**, discover how to protect our most precious liquid resource in **Water Awareness**, and explore the global systems driving our shifting planet in **Climate Change**.

Together, these interactive field lessons empower young minds to connect where we've been with where we're heading—equipping them to become the informed, resilient stewards our planet needs today!

CCE NEWSLETTER EDITION 2 – 2026 COMPREHENSION QUIZ



LEVEL 1: REMEMBERING & DIRECT RECALL (EASY)

1. In what **year** was **Genadendal** founded, and **who** was its founder?
2. What does the name **El Niño** mean in **Spanish**?
3. How many **total shipwrecks** are estimated to **lie along** the South African **coastline**?

LEVEL 2: UNDERSTANDING & EXPLAINING (MODERATE)

4. **Why** did **King John II of Portugal** change the peninsula's name from **Cabo das Tormentas** to **Cabo da Boa Esperança**?
5. What does a **maritime archaeologist** do, and what **famous slave ship** did they excavate off Clifton?
6. In simple terms, what happens to the **Pacific Ocean trade winds** during an **El Niño event** to **change global weather**?

LEVEL 3: APPLICATION & PROBLEM SOLVING (CHALLENGING)

7. **Being a Conservationist:** Imagine your school is preparing for a severe drought. Based on the "Water Warrior" tips in the newsletter, describe **TWO actions** your class can take to **save water and protect local wildlife.**
8. **Connecting Concepts:** How does **clearing away invasive plants** help **protect our soil** and **build *resilience*** during severe storms?

LEVEL 4: CRITICAL THINKING, INFERENCE & SYNTHESIS (HIGHER ORDER)

9. **The Weather Puzzle:** The newsletter describes South Africa as facing a **"giant weather puzzle" in 2026**. Explain why dealing with both the **recent 2026 storms** and an **upcoming "Super El Niño"** creates a **DOUBLE CHALLENGE** for communities.
10. **Making Connections:** Nelson Mandela renamed the **Official Presidential Residence in Cape Town** to "Genadendal." Based on the newsletter's fast facts, **why do you think this history inspired him**?

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TEACHER / EDUCATOR ANSWER KEY

1. **Founding of Genadendal:** Founded in **1738** by Moravian missionary **George Schmidt**.
2. **El Niño Meaning:** It means **"the little boy"**.
3. **Shipwreck Count:** Roughly **3 000 shipwrecks** (with nearly 1 000 off the Cape Peninsula alone).
4. **Name Change Reason:** *Cabo das Tormentas* ("Cape of Storms") sounded scary to sailors. King John II renamed it *Cape of Good Hope* to sound welcoming and celebrate the optimism of finding a sea trade route to India.
5. **Maritime Archaeologist:** A specialized scientist who dives deep underwater to map wreck sites and recover history. They excavated the **São José-Paquete d'Africa** (lost in 1794).
6. **Trade Winds Shift:** Normally trade winds blow east to west, but during El Niño, they **weaken or flip direction** (west to east), letting a massive layer of warm ocean water flood across the surface like a giant heater.
7. **Water Warrior Actions (Any two):**
    - Turn off taps while brushing teeth or soaping hands/body.
    - Reuse leftover water from drinking bottles for plants.
    - Mulch soil with dry leaves/bark to keep moisture in.
    - Leave shaded water bowls out for birds and insects.
8. **Invasive Plants & Resilience:** Invasive plants have weak root systems or consume too much water, which weakens the soil. Clearing them helps native soil stay firm, reducing soil erosion and landslides during heavy rain.
9. **The Double Challenge:** Cape Town first suffered nearly R10 billion in damage from massive **floods** (washed-away roads, bridges, damaged homes), and now must immediately prepare for the opposite extreme: severe **heatwaves and droughts** from a Super El Niño. Rebuilding infrastructure while facing water shortages is a huge double strain.
10. **Mandela's Inspiration:** Genadendal was built on values of harmony, education (home to Southern Africa's first Teachers' College), craftsmanship, and bringing people together—values Mandela wanted to represent for a united South Africa.