

## Republic of the Philippines

## Department of Education

DepEd MEMORANDUM No. 071 , s. 2020

## 2020 SCIENCE FILM FESTIVAL

To: Regional Directors Schools Division Superintendents Public and Private Elementary and Secondary School Heads

All Others Concerned



- In support of the Memorandum of Agreement between Goethe-Institut Philippinen and the Department of Education (DepEd), the 2020 Science Film Festival with the theme, Sustainable Development, will be conducted from November 4 to December 4, 2020.
- The Festival aims to promote learners' science literacy and enhance their awareness on contemporary scientific, technological and environmental issues through the medium of film and television.
- Learners from both public and private secondary schools, particularly the Regional Science High Schools (RSHSs), Legislated Science High Schools (LSHSs), Science, Technology and Engineering (STE) implementing schools and Special Science Elementary Schools (SSES) are invited to watch the films.
- Goethe-Institut Philippinen will arrange the virtual screening of the films through an online platform which will be set up during the festival period. Online registration at http://deped.in/XbHFx9W is needed to be able to access and view the science films.
- The synopses of the science films are enclosed for reference. Other Festival details may be accessed through https://www.goethe.de/ins/ph/en/index.html.
- Participation of learners shall be subject to the no-disruption-of-classes policy stipulated in DepEd Order No. 9, s. 2005 titled Instituting Measures to Increase Engaged Time-on-Task and Ensuring Compliance Therewith. The activity is also subject to no-collection policy as stated in Section 3 of Republic Act No. 5546, An Act Prohibiting the Sale of Tickets and/or the Collection of Contributions for Whatever Projects or Purpose from Students and Teachers of Public and Private Schools, Colleges and Universities.
- For more information, please contact Ms. Grace T. Panganiban, Goethe-Institut Philippinen at telephone nos. (02) 8840-5723 to 24.

8. Immediate dissemination of this Memorandum is desired.





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Secretary

Encls.:

As stated

Reference:

DepEd Memorandum No. 152, s. 2019

To be indicated in the <u>Perpetual Index</u> under the following subjects:

LEARNERS SCIENCE EDUCATION SCHOOLS TEACHERS

DJP APA MPC <u>DM 2020 Science Film Festival</u> 0203 August 25, 2020





## Science Film Festival 2020 Film Details

Title:

Planet Darwin

Director:

Esteban Gómez

Produced by

Consejo Nacional de Televisión

Running Time:

05:00 Minutes

Country: Year: Chile 2020

Age Guideline:

Early Learners (5–8)

This animation series features a very curious Darwin's Frog who explores the world around it and learns about environmental care, what to do in case of disasters and how to face the challenges of climate change. Darwin looks at the news that extreme weather events occur in different parts of the world related to climate change and realizes that it also affects its own environment.

Title:

Knietzche and the Environment

Original Title:

und die Umwelt

Director:

Anja von Kampen

Produced by

vision X Mediengesellschaft mbH, WDR

Running Time:

03:04 Minutes

Country: Year: Germany 2019

Age Guideline:

Primary School (9-11)

Knietzsche believes that the protection of the environment is important, but not always easy. Many things that we humans like to do produce garbage or pollute the air. Even though nature is so good to us! So, it is all the more important that everyone does his or her part to ensure that the earth continues to prosper in the future. Packaging waste, air pollution, consumption and global warming are topics that Knietzsche addresses. After all, the environment concerns us all.

Title:

nine-and-a-half - Your Reporter: Corona, Flu & Co -

The Long Journey of Viruses

Original Title:

neuneinhalb - Deine Reporter: Corona, Grippe & Co - Der lange Weg

der Viren

Director:

Diana Peßler

Produced by:

tvisison GmbH/WDR

Running Time:

09:30 Minutes

Country:

Germany

Year:

2020

Age Guideline:

Primary School (9-11)

They are tiny. They have no legs. And yet they can travel long distances and even spread across national borders: viruses. The new Coronavirus 2019-nCov has also done this. Jana therefore wants to know how the small pathogens can get this far – and how we can protect ourselves from them. She visits a virologist who is researching a vaccine against the new 2019-nCov virus. Jana and a school class also show that we can all do something to make it as difficult as possible for viruses to spread.

Title: nine-and-a-half – Your Reporter: Precious Water –

Where Does Our Drinking Water Come From?

Original Title: neuneinhalb – Deine Reporter: Kostbares Nass – Woher kommt unser

Trinkwasser?

Director: Christian Loß

Produced by: tvisison GmbH/WDR

**Running Time:** 09:30 Minutes **Country:** Germany

Year: 2019

Age Guideline: Primary School (9-11)

About one full bathtub, that is the average amount of water every German uses per day. Of course, some for drinking, but also for showering, washing clothes, brushing teeth and so on. But who actually makes sure that fresh tap water is always readily available? And what happens to the water when it disappears in the drain? Jana follows the flow of the water and learns how wastewater sses through many elaborate stages to be cleaned and treated so we can drink it and use it again. She also learns about the role of the natural water cycle.

Title: nine-and-a-half – Your Reporter: STEM Wins – More

Girls in Technology

Original Title: neuneinhalb -- deine Reporter: MINT gewinnt -- Mehr Mädchen in die

Technik!

Director: Sarah Schultes

Produced by: tvisison GmbH/WDR

Running Time: 09:30 Minutes

**Country:** Germany **Year:** 2019

Age Guideline: Primary School (9-11)

STEM: These four capital letters stand for science, technology, engineering and math. But also for a mystery: Although girls are good at STEM subjects, they are much less

likely to choose a career in this area than boys. Why is that? How can it be changed? Robert wants to find out at the German Aerospace Center (DLR). The DLR regularly receives students in its School Lab to conduct research and make experiments to spark their interest in STEM. Robert also meets industrial mechanic Jasmin Flamm, who knows which heroines of science you should definitely know and has tips for girls who are interested in MINT subjects

Title: Ground of Story: Circular Economy

**Director:** Juliane Zerbst

Produced by: Markenfilm Crossing GmbH, European Parliament

Running Time: 02:20 Minutes
Country: Germany
Year: 2017

Age Guideline: Secondary School (12–16)

To fight the compelling problem of waste an ambitious waste prevention and resource efficient strategy is needed. But how can Europe decrease the rapid consumption of a significant amount of natural resources? Is there a way to produce eco-friendly products? The short film follows Jerzy Wysocki, the founder of *Biotrem* in Warsaw, who produces eco-friendly and sustainable plates and cutlery from leftover wheat bran. Showing the typical production process from the raw materials to the dissolving of the final product, the film highlights the importance of a turn to a circular economy that produces less waste and protects the environment.

Title: Ground of Story: Future of Cities

**Director:** Juliane Zerbst

Produced by: Markenfilm Crossing GmbH, European Parliament

Running Time: 02:48 Minutes
Country: Germany
Year: 2017

Age Guideline: Secondary School (12–16)

More and more people live in cities. The EU needs smart solutions for urban areas. But how can the EU support cities to develop and share solutions to tackle common challenges such as air pollution, digitalization and social inclusion? Martin Brynskov, Academic coordinator of AU Smart Cities, talks about the need to take on the Smart Cities, talks about the need to take on the challenges that come along with rising populations, invest in making modern cities smarter and more interconnected. The promising Example Smart Aarhus proposes a new way of organizing efforts to find effective and sustainable solutions to the challenges faced by many cities today.

Title: Ground of Story: Green Energy

**Director:** Juliane Zerbst

Produced by: Markenfilm Crossing GmbH, European Parliament

Running Time: 02:07 Minutes
Country: Germany
Year: 2017

Age Guideline: Secondary School (12–16)

By 2030, the European Union wants to generate almost 30% of its electricity from renewable energy sources. Offshore wind energy plants that generate renewable energy are helping to become independent of electricity imports from non-EU regions. On the platform Helwin Alpha, the alternating current coming from the wind parks is converted into direct current which is transmitted to the mainland without loss. However, when a high amount of energy is generated on one day, the grid cannot transmit it all. That's why interconnectors to other countries are being built to make sure the energy is transmitted and used.

Title: Ground of Story: Hydrogen – The Future of Energy

Director: Juliane Zerbst

Produced by: Crossing GmbH, European Parliament

Running Time: 02:58 Minutes
Country: Germany
Year: 2019

Age Guideline: Secondary School (12–16)

Energy is one of the main issues shaping our future. To stop obtaining energy from coal, oil or gas, the European Parliament is funding projects for alternative sources of energy. A great candidate is hydrogen extracted from water. Not only it can be easily stored and transported, it can also be used in very flexible ways. Hydrogen can be used directly as a fuel or in the production of synthetic fuels in combination with CO2 from the synthetic fuels and with CO2 from the atmosphere. To move

away from CO2-based raw materials towards a renewable energy industry by 2050 we need to move fast.

Title: Ground of Story: Vertical Farming

Director: Juliane Zerbst

Produced by: Markenfilm Crossing GmbH, European Parliament

Running Time: 02:41 Minutes
Country: Germany
Year: 2018

Age Guideline: Secondary School (12–16)

The global population is projected to reach 9.8 billion by 2050. National populations are expected to more than double in 40 countries. In a world of declining resources, how can Europe stay at the forefront of agricultural innovation and sustainability? The global agriculture is facing a number of major challenges in the years to come, such as fast world-wide population growth, climate change, an increasing demand for energy and water. The short film shows Robert Jordas, Founder of Robbes Little Garden in Finland takes on these major challenges by growing rows of vegetables and plants stacked vertically, using energy-efficient LEDs and 98% less water than in the open.

Title: Hal Holmes – Down to the Core

**Director:** Alex Keefe

Produced by: Angel Sharp Media
Running Time: 04:34 Minutes
Country: United Kingdom

Year: 2019

Age Guideline: University and General Public (17+)

Hal has always had a passion for building things, and now he is out to use his skills to slow the destruction of the natural world. At first his outlandish idea to repurpose a unique ultrasound tool usually used for cancer treatments, to rapidly break down and read the DNA of timber, baffled fellow scientists. However, Hal's brainwave might just provide an answer to the vast illegal logging trade: A way to instantly tell the origin of every single piece of wood.

Title: Jielai Zhang – A Flash of Discovery

**Director:** Alex Keefe

Produced by: Angel Sharp Media
Running Time: 05:03 Minutes
Country: United Kingdom

Year: 2019

Age Guideline: University and General Public (17+)

Astronomer Jielai Zhang explores 'fast radio bursts'— mysterious flashes in deep space in order to understand them, she started looking for new software and thus came across the medical application of 'deep learning'. Deep learning is well suited for extracting information from images, including ultrasound images. Once she has mastered its application to fetal development, she hopes to apply the technology to illuminate the most remote corners of the universe.

Title: Jina Ko – A Needle in a Haystack

**Director:** Alex Keefe

Produced by: Angel Sharp Media
Running Time: 04:55 Minutes
Country: United Kingdom

**Year:** 2019

Age Guideline: University and General Public (17+)

There are billions of minuscule vesicles floating around in the cells of the human body. A tiny hidden few of them are indicative of cancer or other diseases. Bioengineer, Jina is risking her career to try to find that needle in a haystack and revolutionize how disease is diagnosed. It's a massive challenge, but if she's successful she hopes her tools will enable early diagnosis, and guide patients to the right therapy.

Title: Madagascar: A Very Unique Island

**Director:** Luis Navarro

Produced by: Divulgare Vigo University

Running Time: 09:16 Minutes

**Country:** Spain **Year:** 2019

Age Guideline: University and General Public (17+)

This film showcases some peculiarities about the biodiversity of a very unique island: Madagascar. Besides showing the beauty of the peculiar biodiversity of this island, we also take the opportunity to review some concepts related to biogeography — a discipline of biology that is responsible for explaining the geographical distribution of living beings on the planet. The short film uses footage from field trips and is produced for the scientific outreach website Divulgare.net.

Title: Born to be Wild: Hungry Planet

Directors: Karl Perry Laylo, Dianne Faye Magbanua, Rizza Mendiola-Fillone

Produced by: GMA Network, Inc.
Running Time: 20:25 Minutes
Country: Philippines
Year: 2018

Age Guideline: Secondary School (12–16)

Every living thing needs the Earth to survive. Humans, in particular, have a great dependence on nature for the most basic need: Food. People rely on vegetables, meat and other food sources for sustenance. But what impact does our hunger have on the environment? With the growing demand for resources, can the planet continue to fill everyone's stomachs? Veterinarian-hosts Doc Ferds and Doc Nielsen follow the trail of food in the Philippines from the soil and sea to the table. Exactly how much water, how much land, and how much energy does it take to make our meals?

Title: Sky Islands: A Time Travel in the Andes Mountains

Director: Catalina Giraldo

Produced by: Catalina Giraldo with support by Hugo de Vries Fonds/NUFFIC

Running Time: 13:53 Minutes

Country: Colombia, The Netherlands

Year: 2017-2020

Age Guideline: University and General Public (17+)

The film tells an ecological chapter in the history of the northern Andes in South America. The current anthropogenic global warming affects not only humans, but also other species and inhabitants of the earth. 3D animation, time-lapse photography and film footage visualize how an extraordinary ecosystem called the Páramo, a refuge of unique diversification and a hotspot of biodiversity, took at least two million years of evolution to form. The visualization opens a door to travel from the Pleistocene to the Anthropocene as a first step toward opening minds to the importance of biodiversity.

Title: Me & My Robot

Director: Mark Decena
Produced by: Kontent Films
Running Time: 38:18 Minutes
Country: Thailand, USA

**Year:** 2019

Age Guideline: Secondary School (12–16)

Each year, students from around the planet compete in the World Robot Olympiad. The film accompanies 17 teams from 9 different countries preparing for the competition. Using video diaries of the children themselves, we see their trials and tribulations as they head to Thailand for the 2018 finals. This isn't just a story about winners and losers, but something much bigger. This unique event brings together children from around the world to work in the common language of engineering. With the power technology to change the world, they will solve some of the most complex problems we face.

Title: A Natural Affair – The Human/Nature Connection

**Director:** Susanne Lummer

Produced by: Terra Mater Factual Studios

Running Time: 38:15 Minutes

Country: Austria Year: 2019

Age Guideline: University and General Public (17+)

We love them, we eat them, it's a very special affair: humans have a fascinating and occasionally somewhat surreal relationship with the animals and even plants that surround us. It is a connection like no other and can be both mutually beneficial and mutually destructive. This film explores certain examples of this relationship, areas in which the human and the natural world meet in interesting and unusual ways.

Title: Animals at the Border

Original Title: Tiere an den Grenzen

Director: Cornelia Volk

Produced by: Mitteldeutscher Rundfunk

Running Time: 43:30 Minutes
Country: Germany
Year: 2019

Age Guideline: University and General Public (17+)

The Iron Curtain fell in 1989. New paths opened, also for animals. But now the border fences are back, to ward off refugees. All over the world new fences are built to block refugees. What impact do they have on endangered species like the Dinaric lynx or the Greek tortoise in Europe? And will they stop the return of beavers and jaguars in the borderland of Sonora and Arizona? The film accompanies scientists in Croatia, Slovenia and Bulgaria in search of the first answers, and also looks to Mexico: There, the wall planned by the USA endangers two breathtaking animal comebacks.

Title: Engineers Work on the Climate

Original Title: Ingenieure schrauben am Klima

**Director:** Ingolf Baur

Produced by: ZDF/3sat
Running Time: 43:30 Minutes
Country: Germany

**Year:** 2020

Age Guideline: University and General Public (17+)

Some scientists believe that we need to research radical, perhaps even dangerous, technologies to lower Earth's temperature in the near future by geoengineering. The reduction of CO2 emissions is probably not going to be fast enough to avoid the climate tipping point. Engineers and researchers develop projects to intervene in the geochemical cycles of the earth. Is geoengineering human hubris or will it save the climate?

Title: Lesch's Cosmos: Changing Climate – No One Dies on

**Their Own** 

Original Title: Leschs Kosmos: Klima im Wandel – Keiner stirbt für sich allein

**Director:** Christina Schrader

Produced by: ZDF

Running Time: 29:00 Minutes
Country: Germany
Year: 2020

Age Guideline: University and General Public (17+)

While humans are still debating, nature is right in the middle of it: climate change. And you can see the consequences not only in the Arctic, but also directly on our doorstep. That's because the climate factor is crucial in the game of life. If it changes, the cards are shuffled again. Experts predict that global weather phenomena will lead to increased extreme events. Heat records have now also been reached in Siberia. What happens there also affects us. The thawing of the permafrost soil could greatly accelerate change worldwide and irrevocably fuel global warming.

Title: Quarks: Alert in Space – How Satellites Changed Our

Lives

Original Title: Quarks: Alarm im All – Wie Satelliten unser Leben verändern

**Director:** Markus Schall (Executive Producer)

Produced by: WDR

Running Time: 44:46 Minutes
Country: Germany
Year: 2018

Age Guideline: University and General Public (17+)

A revolution is taking place unnoticed above our heads. The changes in space will be gigantic in the next few years. There are approximately 1,800 functional satellites that are currently orbiting the earth. But soon, their number will increase tenfold. It's getting tight in the sky. And space junk is already a huge problem for which there is still no practical solution. But why all the new satellites? Internet should be available all over the world, even in the most remote areas. And in the future, swarms of small satellites will also provide a complete picture of the Earth - in real time. How will the revolution in space change our lives?

Title: The Atom Araullo Specials: No Leftovers

**Director**: lan Carlos Simbulan (Executive Producer)

Produced by: GMA Network, Inc.
Running Time: 39:55 Minutes
Country: Philippines

Year: 2018

Age Guideline: University and General Public (17+)

Around 7.3 million Filipinos consider themselves food poor, according to a recent survey by the Social Weather Stations. Despite this number, food wastage is a real problem in the Philippines. There may be enough food in the country for everyone, yet 296,869 metric tons of rice is wasted every year in the country, enough to feed two million Filipinos. The film traces how food is wasted from production to consumption and portrays in Samar, where poverty and malnutrition are at alarming levels, those suffering from lack of food – children who are severely wasted.

Title: What Have We Done?

Original Title: Hvað höfum við gert?

Director: Sagafilm, Óskar Jónasson
Produced by: Sagafilm, Tinna Jóhannsdóttir

Running Time: 30:00 Minutes

Country: Iceland Year: 2019

Age Guideline: University and General Public (17+)

Climate change for non-scientists: This documentary series explains how consumption is the catalyst for the greatest man-made climate changes the world has seen and what consequences these will have for life on Earth – for oceans, glaciers, life on land, society, companies and the global economy - and presents solutions. The only way to stop the damage of climate change is by radically changing the consumption patterns of everybody on Earth; individuals, companies and societies. By changing our attitudes and behavior we will create sustainability and more equality.

Title: Borneo – Earth's Ancient Eden

**Director:** Matt Hamilton

Produced by: Terra Mater Factual Studios

Running Time: 49:37 Minutes

Country: Austria
Year: 2019

Age Guideline: University and General Public (17+)

Borneo has spent its entire existence, well over 100 million years, circling the equator. Consistent sunlight, warmth and rainfall means the perfect conditions for life. But it is the battle for those resources that makes Borneo one of the richest regions on the planet in terms of biodiversity. It fuels a bizarre realm of giant apes, tiny bears, plants that kill and jellyfish that farm. This film reveals a spectacular and diverse cast, as well as a behavior never documented before – pied hornbills trying to hunt bats in flight. Borneo still has secrets to reveal.

Title: Dragons & Damsels

**Director:** Steve Nicholls

Produced by: Terra Mater Factual Studios, Hooded Crow

Running Time: 50:00 Minutes

Country: Austria Year: 2019

Age Guideline: University and General Public (17+)

More beautiful than butterflies, more spectacular fliers than hummingbirds, and with intriguing behavior as complex as mammals or birds, dragonflies and damselflies are the ultimate insects. They've been flying around for hundreds of millions of years, crossing paths with dinosaurs and are yet often described as 'primitive' – which is simply wrong. Surviving on the planet for that long

means being pretty special. We discover jealous rivals, adulterous relationships and gallant lovers – but beneath this miniature soap opera are sophisticated behaviors driven by natural selection.

Title: Flexible Buildings – The Future of Architecture

Original Title: Flexible Räume – Die Zukunft des Bauens

**Director:** Marcus Fitsch

Produced by: Hoferichter & Jacobs GmbH, MDR, ARTE

Running Time: 51:00 Minutes
Country: Germany
Year: 2019

Age Guideline: University and General Public (17+)

There has never been a time when as many people populated Earth as nowadays. We live in a time of extreme urbanization, especially in South America, Africa or India. In the next 15 to 20 years, Africa will need as many houses as have been built in the last 200 years of European history. The biggest problem is social injustice. Architects, engineers and urban planners from all over the world are looking for answers to some of the most urgent questions of this decade: How do we view living together in a globalized world? And do we even have room for the future?

Title: Genius Sea Predators - Hunter-Voyagers

Original Title: Super-prédateurs des mers. Chasses en territoire hostile

Directors: Jérôme Julienne, John Jackson

Produced by: ZED for ARTE GEIE. in association with CINEMAGE 14

Running Time: 52:00 Minutes

Country: France Year: 2019

Age Guideline: University and General Public (17+)

We are only beginning to understand how marine mammals hunt. Their methods that are surprisingly sophisticated, and that leave scientists in awe with each new discovery. How do animals of the same species come up with such astoundingly unique methods of finding and killing their prey? Using drones, high-speed cameras and underwater cameras the diverse tricks and tactics used by marine wildlife are explored and explained. From the humpback whale in Alaska's Glacier Bay trapping a school of sardines to the Patagonian orcas landing on the beach to catch sea lion cubs, and Namibian hyenas infiltrating colonies of sea lions at night, this documentary reveals unseen perspectives of the genius behind these great deep-sea hunters.

Title: Humanity4.0

Original Title: 4차인간
Director: MeeSol Yi
Produced by: MeeSol Yi, EBS
Running Time: 46:37 Minutes
Country: Republic of Korea

**Year:** 2018

Age Guideline: University and General Public (17+)

Can we be immortal? Can it be possible to preserve our loved ones forever? One of the most respected mechanical engineers in the world, Professor Dennis Hong at RoMeLa, UCLA, is leading the work on an advanced technology, which recreates loved ones as immortal digital beings. He has tried out the procedure to transform the memory of his beloved son, Ethan. This documentary addresses the potential future ahead of us, which is sculpted by this technology. What does it tell us about who we really are and what makes humanity?

Title: Panda Goes Wild

Director: Sima David-Lalic

Produced by: Terra Mater Factual Studios, Mark Fletcher Productions, Shanghai Science

& Technology Museum

Running Time: 52:00 Minutes

Country: Austria Year: 2018

Age Guideline: University and General Public (17+)

We know pandas almost entirely from zoos, and little about their behavior in the wild. Their mountainous home in China covers a huge area of dense bamboo forest and discovering how wild pandas live has proved almost impossible. The rumor is that pandas behave very differently in the wild. It provides clues as to why they can't breed in captivity. Strange cries, fights between males, blood-stained trails, individuals moving huge distances and females held captive; all this adds to the mystery. This film documents wild pandas for the very first time.

Title: Saving the Dead Sea

Director: Terri Randall

Produced by: WGBH Educational Foundation

Running Time: 53:15 Minutes

Country: USA Year: 2018/2019

Age Guideline: University and General Public (17+)

The Dead Sea is dying: Since 1976, its level has dropped more than 100 feet, leaving its coastline pockmarked with thousands of sinkholes. But after more than a decade of research and debate, scientists, engineers, and political leaders have come up with a daring plan: connect the Red Sea to the Dead Sea by way of a massive desalination plant. If it's successful, the project could not only revive the sea, but also help ease political tensions and water shortages in the region. NOVA follows this endeavor – perhaps the world's largest water chemistry experiment – to save the Dead Sea and bring water to one of the driest regions on Earth.

Title: Sounds of Nature: The Mystery of the Invisible Fish

Original Title: A L'Écoute de la Nature

Director: Jacques Mitsch

Produced by: GEDEON Programmes, ARTE GEIE

Running Time: 52:00 Minutes

Country: France Year: 2019

Age Guideline: University and General Public (17+)

Have you ever heard the scream of a caterpillar? Did you know that fishes talk or that elephants can hear with their feet? Since the dawn of time, animals communicate in thousands of ways. Scientists from all over the world dedicate their lives to researching the mysteries of animal communication. In Corsica and Sardinia, Eric Parmentier and Lucia Di Iorio show how fish make noises underwater to communicate with each other, including clicks, grunts, burps — and even farts. Alongside with sounds-hunters wiretapping biodiversity, we will discover worlds revealed by acoustic journeys defined by water.

Title: Sounds of Nature: The Ballet of Mag Geese

Original Title: A L'Écoute de la Nature

**Director:** Jacques Mitsch

Produced by: GEDEON Programmes, ARTE GEIE

Running Time: 52:00 Minutes

Country: France Year: 2019

Age Guideline: University and General Public (17+)

Have you ever heard the scream of a caterpillar? Did you know that fishes talk or that elephants can hear with their feet? Since the dawn of time, animals communicate in thousands of ways. Scientists from all over the world dedicate their lives to researching the mysteries of animal communication. On the five continents, they open the doors of their open-air laboratories and invite us to glimpse a new and unusual world. Alongside with sounds-hunters wiretapping biodiversity, we will discover worlds revealed by acoustic journeys defined by air in this episode.

Title: Sounds of Nature: The Enigma of the Silent Cry

Original Title: A L'Écoute de la Nature

Director: Jacques Mitsch

Produced by: GEDEON Programmes, ARTE GEIE

Running Time: 52:00 Minutes

**Country:** France **Year:** 2019

Age Guideline: University and General Public (17+)

Have you ever heard the scream of a caterpillar? Did you know that fishes talk or that elephants can hear with their feet? Since the dawn of time, animals communicate in thousands of ways. Some use the properties of the soil to converse with others or to intimidate an intruder. In Namibia's Etosha National Park, Caitlin O'Connell captures communications between elephants as they pass through the ground. And prairie squirrels communicate by ultrasound to avoid being spotted by predators. In Boston, Jayne Yack is studying the incredible diversity of sounds produced by insects.

Title: Toilets – A New Era

Original Title: Toilettes Sans Tabou

**Director:** Thierry Berrod

Produced by: Mona Lisa Production

**Running Time:** 51:32 Minutes

Country: France Year: 2019

Age Guideline: University and General Public (17+)

While poor countries are sorely lacking toilet facilities, rich countries are wasting water with each flush. In one year, we produce more than 720 million tons of solid excrements and 570 million liters of urine in the world. Thus, combining the disposal of our droppings and water resource management is a major environmental challenge. The *Bill and Melinda Gates Foundation* repeatedly asked to create the toilets of the future, and to provide sustainable sanitation solutions for the 2.3 billion of humans who are lacking water and access to proper facilities. With humor and scientific rigor, this documentary lifts the veil on this taboo and takes us all over the world to discover what the future holds for our toilets.

Title: Under Cover – Every Body Needs a Coat

**Director:** Ivo Filatsch

Produced by: Terra Mater Factual Studios

Running Time: 50:03 Minutes

Country: Austria

**Year:** 2019

Age Guideline: University and General Public (17+)

From fur to feathers, from scales to shells – every creature has some form of characteristic outer layer. This not only determines the outward appearance of the creature, but also serves a number of different purposes that ensure both the survival of the individual lifeform and the species as a whole. It is often said that one should never judge a book by its cover, but that is exactly what this film does – exploring how the different types of outer shells in the animal kingdom have evolved over millions of years, the purposes they serve and how they allow species to survive and thrive in a wide variety of habitats and conditions.

Title: Breakpoint: A Counter-History of Progress

Original Title: L'homme a mangé la terre

Director: Jean-Robert Viallet

Produced by: Victor Ede, Alexandre Cornu

Running Time: 98:32 Minutes

Country: France Year: 2018

Age Guideline: University and General Public (17+)

It is still being debated whether humankind has changed the planet irreversibly. Were the developments of coal and oil the final nails in Earth's coffin? Had other paths been taken, would the planet look very different now? For the last two centuries progress has provided us with better ways of living. But progress has also given us napalm, pesticides, nuclear waste and global warming. In the last 40 years, the global scientific community has intensified research and warnings, and they regard our times as a new geological era. Mixing footage and propaganda images with an original soundtrack, the film looks back at 200 years of development to provide an alternative view of our history of progress.

Title: Tsunamis: Facing A Global Threat

Original Title: Tsunamis: Une Menace Planétaire

Director: Pascal Guérin

Produced by: ZED for ARTE France

Running Time: 52:00 Minutes

Country: France Year: 2020

Age Guideline: University and General Public (17+)

Tsunamis are among the planet's deadliest natural phenomena. They are so sudden and powerful that in a matter of a few hours they can destroy everything and disappear. Nowadays, scientists understand the phenomenon better and develop models of tsunami's dynamics. This film documents the field surveys with leading international experts in Palu, Indonesia, where a violent tsunami stormed the region in 2018. The investigation reveals the complex mechanics of tsunamis, explains the most advanced prevention technologies and lets viewers discover the most likely potential scenarios.

Title: Born To Be Wild: Big Catch

Director: Rizza Mendiola-Fillone, Dianne Faye Magbanua, Luzviminda Alfaro-

**Balingit** 

Produced by: GMA Network, Inc Running Time: 21:39 Minutes Country: Philippines Year: 2019 Age Guideline: University and General Public (17+)

The Philippines are home to some of the most diverse assortment of marine life on Earth. Living in a country that is composed of more than 7, 000 islands, many Filipinos rely on the sea to survive. 'Born to be Wild' investigates how a country so rich with marine life is slowly depleting its resources. Doc Ferds and Doc Nielsen trace the fish trail from ocean to market. They join fishermen at sea to understand the difficulties and dangers they face to catch fish. The 'galunggong' or blue mackerel scad used to be called 'the poor man's fish' due to its abundance and affordability, today, however, it is more and more difficult to catch. Doc Ferds investigates in the Batangas province how the endemic tawilis became endangered.

Title: I-Witness: The Island With No Land

Director: Karl Perry Laylo, Dianne Faye Magbanua, Rizza Mendiola-Fillone

Produced by: GMA Network, Inc Running Time: 25:02 Minutes Country: Philippines Year: 2018

Age Guideline: University and General Public (17+)

Not far from Manila is a community where the land has vanished. The ruins of Sitio Pariahan in Bulacan jut out from a permanent flood, the wretched testament to a once thriving village. Alerted by haunting images they see online, Howie Severino and his documentary team travel to this water world to investigate what happened. They find dead mangroves, gutted school buildings, and crumbling shanties. But they also find a smattering of survivors of a great deluge, who live on the water and nervously await the next catastrophe. The story of the island with no land is a precautionary tale of what is happening to coastal villages throughout the Philippines.

Title: The Atom Araullo Specials: Bird Hunt

**Director:** Ian Carlos Simbulan (Executive Producer)

Produced by: GMA Network, Inc.
Running Time: 42:45 Minutes
Country: Philippines

**Year:** 2019

Age Guideline: University and General Public (17+)

The lush tropical forests of the Philippines are home to over 500 species of birds – 200 of which can be found nowhere else in the world. Many of these birds, however, are in danger of extinction. In Mindanao, the largest eagle in the world – the Philippine Eagle, declared as critically-endangered – is not only threatened by poaching and hunting. One juvenile Philippine eagle was found dead after it was electrocuted in the power grid that has now encroached into its habitat. Meanwhile, in Surigao, the documentary team made another startling discovery – the Mindanao hombill, which was presumed extinct, was not only spotted in the wild, one was also seen chained to a post outside a house.