

Tales, Videos, Games and Environmental Education to Engage Children and Young Adults: Looking for Funny Approaches to Get Involved with SDGs from RECIDA (Spain)

Rosario Toril Moreno

National Centre of Environmental Education. National Parks Autonomous Agency, Ministry for the Ecological Transition and the Demographic Challenge. Valsaín, Segovia, Spain.

E-mail address: rtoril@oapn.es

Montserrat Grabolosa Sellabona

La Garrotxa Volcanic Zone Natural Park Documentation Centre
Ministry of Climate Action, Food and Rural Agenda. Government of Catalonia. Olot, Girona, Spain.

E-mail address: wgrabolo@gencat.cat

Marga Muñoz Moreno

Water and Environment Documentation Center (CDAMAZ)

Environment and Sustainability Service

Zaragoza City Council. Zaragoza, Spain.

E-mail address: cdama-gestion@zaragoza.es

Juan Carlos Navarro García

José Ortega y Gasset Public Primary School. Ceuta, Spain.

European Climate Pact Ambassador

E-mail address: juancarlosnavarrogarcia74@gmail.com

Alfonso Peña Rotella

Documentation and Resources Center for Environmental Education of Cantabria (CEDREAC)

Environmental Research Center (CIMA). Torrelavega, Cantabria. Spain.

Government of Cantabria

E-mail address: pena_al@cantabria.es



Copyright © 2022 by Rosario Toril, Montserrat Grabolosa, Marga Muñoz, Juan Carlos Navarro, Alfonso Peña. This work is made available under the terms of the Creative Commons Attribution 4.0 International Licence:
<http://creativecommons.org/licenses/by/4.0>

Abstract:

The Green Libraries of the Spanish Environmental Documentation Information Network presents some activities and actions that we carry out for children and young adults in order to raise awareness and involve them in sustainability and the SDGs of the 2030 Agenda. Libraries are agents of change and

effective allies in contributing to cultural and transformative change at the intergenerational level. Our way of reaching this public is varied: encourage reading and writing, make them dream of stories using storytelling, have fun and learn with games and videos, feel nature accompanied by library resources, investigate to discover and expand knowledge. And also make alliances that add to our project and amplify the work done to reach a greater number of people. Our planet needs strong community involvement.

Keywords: Green Libraries; Children and youth public; Green library networks; SDGs; Spain

1. Introduction

The Spanish Green Libraries from the Network of Environmental Information and Documentation Centres (RECIDA) carry out multiple activities and actions to raise awareness about caring for our environment, transmitting quality information that helps support more sustainable decisions, promoting collaboration with the young population, attracting the little ones to the world of green readings, which will be the seeds that will blossom in adulthood. We believe that environmental education must be present in all aspects of life, and its journey begins in the early years.

[RECIDA](#) is an active network of professionals from Green Libraries, the result of a project that was born in 2004, within the framework of the Permanent Seminars of the Ministry for the Ecological Transition and the Demographic Challenge¹. The meetings have usually taken place at the National Center for Environmental Education ([CENEAM](#)) in Valsain, Segovia, in the peripheral area of the Sierra de Guadarrama National Park. They have also been carried out in other territories, organised by the centres of the Network, since it must be taken into account that it is made up of more than 150 libraries and entities from different administrations. Both from universities and foundations, associations and other institutions located in the 17 autonomous communities in Spain and the Autonomous City of Ceuta.

CENEAM coordinates RECIDA, with the collaboration of the organisers of the annual seminars, in which for many years it has been supporting the Garrotxa Volcanic Zone Natural Park of the Generalitat de Catalonia. In addition to having the support of an Advisory Commission made up of highly prestigious experts.²

The 2030 Agenda and its 17 Sustainable Development Goals are very present in RECIDA's Strategic Plan and it is the basis for the Sustainability Plan that we are carrying out.

In this article we are going to report some of the actions and activities developed by the Green Libraries from RECIDA, in order to involve children and young people in sustainability and SDGs with the resources available in our libraries, which also implies an approach to these information centres.

2. Reading and writing: Green reading – Paper trips

The green readings we offer to children and young people are made up of stories, comics, novels, poems and informative books that can be used in green libraries or loaned to educational centres. During the school year, a large part of these books are sent to schools and high schools for fortnights, a month,

¹ CENEAM. (2002-2021). Working groups: Environmental Documentation Centres and Protected Natural Areas. Ministry for the Ecological Transition and the Demographic Challenge. <https://bit.ly/2NLvw6x>

² The Advisory Commission is made up of: Isidro Aguillo (IPP-CSIC), Elena Primo (Carlos III Health Institute), Jesús Tramullas (University of Zaragoza), José Pino (Sierra Nevada National Park) and Mario Pérez-Montoro (University of Barcelona). Carmen Pérez (INIA) as Honorary Member.

several months, the school year or for the duration of a specific project, as agreed with the school and its needs.

We highlight some Green Libraries that have special collections for children and young people in their bibliographic collections:

[Documentation Centre for Water and the Environment of Zaragoza \(CDMAZ\)](#)



Green packs: This green library has 11 lots that reach an average of 14,000 people per school year. It is worth noting the assembly of rolling libraries of comics during break time in high schools.



Comic Contest: Water Goes! celebrating World Water Day. It was combined with the batch of comics in high schools (youth and teenagers). The encouragement of reading and writing go hand in hand in this action.

[Documentation Center of the Center for University Extension and Environmental Awareness of Galicia \(CEIDA\), Oleiros, A Coruña](#)

This centre is a reference in environmental education in the Region of Galicia. They are highly demanded throughout the school year and as complementary material to these collections, the centre produces [resource guides](#) with reference materials focused on teachers and families.

Travelling suitcases: Naturalist, Literary and Sailor



Naturalistic suitcase: knowing our natural heritage. It includes flora, fauna and fungi guides, field notebooks and other learning resources. They are a good tool to get closer to nature and can be used as a reference source of information when going out on field trips or school trips.

Literary Suitcase: Tales for a Planet

Collection of stories to approach nature through literature. It is a selection of motivating resources for environmental education, and to encourage reading, to imagine, to have fun, and to get excited with their characters and stories.



Seafaring Suitcase: Exploring the Oceans

Collection of informative books and illustrated albums on the theme of the marine environment. Its objective is to show and promote marine culture and knowledge of the oceans in the educational community, as well as the nowadays environmental problems that threaten its conservation, such as the climate emergency or marine litter.

The seafaring suitcases are part of the 'For an Ecological Transition' program that CEIDA develops with the support of the Provincial Council of A Coruña, and support

SDG 14 "Underwater life" from the Sustainable Development Goals of the 2030 Agenda, whose purpose is to conserve and use the oceans, seas and marine resources in a sustainable way.

[CENEAM Documentation Centre, Valsain, Segovia](#)



Green packs. With the aim of supporting the school libraries of the community, around 800 books (informative and literary) are lent throughout the school year, to centres in nearby towns, distributed by their school level. Thematic collections are also sent to other farther territories for specific projects. On the other hand, we receive groups of young people who are working on environmental projects and want to learn more about our resources.

[Documentation centre from Natural Park of the Volcanic Area of the Garrotxa, Olot, Girona.](#)



Mobile libraries of about 20 materials each, in different media: books, games, maps, models, dolls, teaching materials of the protected natural area...; on different topics: volcanoes, fauna and flora, climate change...; also monographs to celebrate anniversaries such as the week of nature, scientific women, environmental education, etc.

[Documentation centres of the Network of Natural Parks. Management of Serveis d'Espais Naturals. Infrastructures Area and Natural Spaces. Barcelona Provincial Council](#)



Parks and libraries, naturally!: collaborative project with public libraries that use educational suitcases in their programs with schools. The selected materials have been made by expert librarians and environmental technicians from the parks. Each natural park has its suitcase: Serralada de Marina, Serralada Litoral, Montnegre i el Corredor and Sant Llorenç del Munt i l'Obac. They include inclusive materials (tactile map and descriptive sheets of the flora and fauna of the parks with drawings in relief and texts with macro characters and superimposed in braille, accompanied by jars with the smells of plant species and the sounds of the animals represented.

[Environmental Education Documentation Service. Barcelona City Council](#)

Pedagogical suitcases: [Suitcase to face the climatic emergency](#), [Suitcase of sustainable food](#).

Selection of informative books, stories, materials and digital resources aimed at early childhood, primary and/or secondary education for teaching and learning content on the different environmental issues of suitcases.



3. Stories to dream: Environmental Storytelling

[School Library. José Ortega y Gasset Public Primary School. Ceuta](#)

[Audio stories from The Hesperides Garden.](#)

In their final stage, they are audio-described stories, which make it easier for children with hearing disabilities to see and read. They are translated into sign language so that the kids can enjoy them. All

the audio stories are broadcasted in the educational environmental podcast in Onda Cero Radio Station. Guardians of Biodiversity has been the latest audio tale based on a story by the Biodiversity Foundation.³

[Escola Collserola School Library, Sant Cugat del Vallès, Barcelona](#)

Literature and Environmental Sciences. Concepts related to knowledge, care and the consequences of environmental degradation are disclosed through tales.

[Waterand Environment Documentation Centre of Zaragoza \(CDAMAZ\)](#)



Green I read you green. Tales in schools.

Storytelling is carried out in the class, in the library or in the school vegetable garden, in the case of early childhood education or special education. Schools and high schools go to the CDAMAZ library through the program “Discover the environment from the Green Library”. Five workshops have been designed with which educational centres learn about the library: water, climate change, noise, responsible consumption and R (waste, recycling...).

Both the loan and the storytelling are offered within an educational framework that all municipal services send to schools at the beginning of each school year.

[CENEAM Documentation Centre, Valsain, Segovia](#)



[Environmental Storytelling](#) .

It is a summer activity, so it is not so directly linked to educational centres. However, since the loan was made throughout the school year, this activity is a festive celebration for students in the area as well as for those who come on holidays. Storytellers are also very attractive for summer camps and the centres for people with intellectual disabilities.

[CDRE, Documentation Centre and Educational Resources. Consorci del Park Natural de la Serra de Collserola. Cerdanyola del Vallès \(Barcelona\)](#)



Collserola Storytelling Suitcase

These are suitcases and backpacks with environmental-themed books. They are treated from fiction and from the dissemination of knowledge, and they are distributed in five groups by ages, from 3 to 12 years.

3. Joining to grow

RECIDA's Green Libraries are always looking for alliances that allow them to broaden their horizon and reach more sectors of the community. We have partnered with [Teachers for Future Spain](#) to reach young people and children, with the [Association of Environmental Information Journalists](#) (APIA) and the [IAIA Association](#). We have also worked with public and municipal libraries such as the BP from Segovia, which has a specialist in the children's and youth section, and with school libraries, such as

³ Remiro, J., Simavilla, M. (2021). Guardianes de la biodiversidad. Fundación Biodiversidad. <https://bit.ly/3O6yX2O>

the project "Learn together" from the Centre for Documentation and Educational Resources of the Consorci del Parc Natural de la Serra de Collserola in Cerdanyola del Vallès (Barcelona).



We have also joined forces with other networks of regional green libraries such as [DocAmbCat](#), which every year proposes to Catalan libraries the celebration of 4 environmental events. The celebration of Nature Week in coordination with the Xarxa per a la Conservació de la Natura, the Generalitat de Catalunya and the Diputació de Barcelona is undoubtedly the most important event for all audiences, especially schoolchildren, and in which a lot of libraries take part. In 2022, more than 25% out of the 555 activities of Nature Week in Catalonia were linked to libraries.

As a result of these alliances we have carried out the following projects:

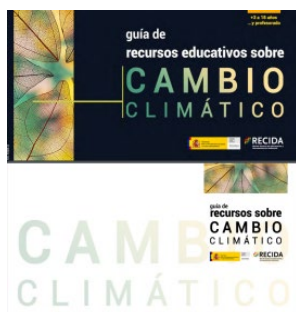
Green Reading Topic Guides

With these guides, produced by several RECIDA centres, we have proposed an open and participatory project.



[Green I read green to you: guide to children's literature, environment and SDG's.](#)

Presented on the occasion of the celebration of International Day of Children's Literature, this guide contains stories and comics from zero to 12 years old (not informative books). The SDG's have been incorporated into each reading, in order to publicise schools and families these important Goals.



[Guide to educational resources on climate change: +3 to 18 years... and teachers](#)

Guide aimed especially at teachers, students and families, so that they can easily have access to a wide variety of resources to learn about, play games or do activities on this topic.

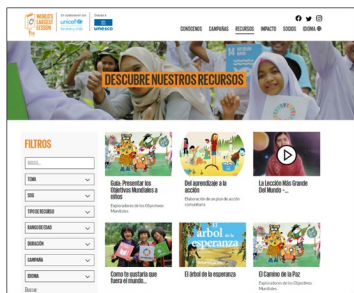
[UN Depository Library \(ONUBIB\) University of Valencia](#)



Groups of students are attended to publicise the SDG's and the resources of the United Nations, among which are found below:

[The greatest lesson in the world.](#) The use of the Sustainable Development Goals in learning is promoted, so that children can contribute to a better future for all. Hundreds of free materials for students ages 4-18 can be found on the Resources page.

[The largest live class in the world.](#) 35-minute learning program suitable for ages 13+ available in English, French and Spanish.



Teach the Objectives for the first time. Free materials for students ages 4-18.

From learning to action. Use the Global Goals as a catalyst for students to identify a local community problem they want to help solve, and create an action plan to get going

A call to climate learning. Video of how young people have found a new way to act against climate change.

Teacher Training

Sending sustainable friendly messages to students in the classroom in an appropriate way requires teachers to have resources, tools, knowledge and materials that enable them to do so. Specific courses are organised for teachers in the CEDREAC's annual training Plan, together with the Teacher Training Centre of the Ministry responsible for Education. Some examples:

- Tales for the future: once upon a time there was climate change.
- How to build your educational escape game for the classroom.
- Educational YouTube for educators.

Alliances with companies and young people

Library of the Ministry of Transport, Mobility and Urban Agenda (Madrid)

ESO + company program

The 4th ESO students carry out a training staying to enrich their training and take them closer to the labour market, in this case they learn about the daily life of a library.

4. Diving in the nets

RECIDA uses various social media channels to engage young people: [Facebook](#), [Twitter](#), [Instagram](#), [Linkedin](#) and [YouTube](#).

Learning and having fun with the videos

CENEAM YouTube Channel



Green Bookworms. Green readings and environmental projects are introduced through interviews conducted by the librarians.



Looks you by where. Various topics in a funny way: water, worm compost, bird feeders, energy saving, forests...

Documentation and Resources Center for Environmental Education of Cantabria (CEDREAC)



[Environmental Synapsis YouTube.](#)

Environmental dissemination channel with a wide variety of videos aimed at the educational community, both students and teachers. Among others, video contests have been held on the treatment of the SDG's in educational centres in the region, or the explanation of special resources aimed at teachers.

5. Surprising us with the game

[Library of the Spanish Weather Agency \(AEMET\)](#)



[Meteoeduca.](#)

The concepts of time, climate, meteorology and climatology are learned in a funny way with these games.

[Water and Environment of Zaragoza Documentation Centre \(CDAMAZ\)](#)

Science escape room The Mystery of Perfilina, related to soil pollution and soil science, highlighting soil scientists who are a benchmark, for whom a comic was created in collaboration with a cartoonist.

[Documentation and Resource Centre for Environmental Education in Cantabria\(CEDREAC\)](#)



Water and Waste Didactic Drawers: These games aim to bring the issues of water and waste closer to children and young people in a playful and participatory way. They contain a large-format environmental education game and support materials for teachers and students that broaden and deepen the educational possibilities of the game.



Escape room. Unboxing the change. Escape talk about climate emergency. Activity aimed at high schools in an innovative layout, halfway between an informative talk, a play and an escape game.



Hall escape about the Sustainable Development Goals.

Resource with two levels: primary and secondary education. The objective of this game is to have a first contact with the SDGs, knowing what they are, their origin, their purposes and how students can contribute to their achievement.

6. Investigating our environment



[Water and Environment of Zaragoza Documentation Centre \(CDAMAZ\)](#)

Science and research with children and young people, in collaboration with the University Centre of Environmental Sciences of the University of Zaragoza, research centres (CSIC), and women scientists from Aragón; Women and Girls Movement in Science 11F, especially for the Week of Women and Girls in Science. CDAMAZ has also collaborated with the Beagle Group Experimental Science Didactics Research Group (University of Zaragoza) carrying out experiments on water quality in the Ebro River through the analysis of macroinvertebrates. These activities are always accompanied by books and readings.

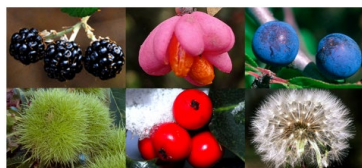


Workshops. Science Duets Naturally, where a family activity is carried out in which fathers and mothers develop an activity of scientific dissemination and experimentation on the one hand and

separately from their offsprings, so that each one learns science at their level. For example, a stop motion workshop on different women who are leaders in environmental science.

[Documentation Centre of CENEAM Valsain, Segovia](#)

Fototeca CENEAM: fotografías sobre naturaleza y medio ambiente
En la Fototeca del CENEAM encontrarás más de 23.000 imágenes para descargar de forma gratuita.
Busca aquí las fotografías



We advise young people who are doing research projects in environmental education or related topics. **Digital Library and digital photo bank** from which more than 23,000 photos of environmental education, climate change, protected natural spaces, fauna, flora from Spain, South America and some from other countries can be downloaded free of charge.

[Documentation Centre and Resource Centre for Environmental Education \(CEDREAC\) in Cantabria](#)



Program Efficient? Naturally! This program promotes the greening of school curricula and educational centres themselves throughout educational practices that involve commitments and actions in favour of sustainable development.

[Barcelona City Council Environmental Education Documentation Service](#)



Air quality indicator measuring devices: carbon monoxide and carbon dioxide (CO/CO₂), nitrogen dioxide (NO₂), ozone (O₃) or particulate matter (PPM) metres that young people use in their projects.

Documentation Centre of the Natural Sciences Museum of Barcelona MCNB



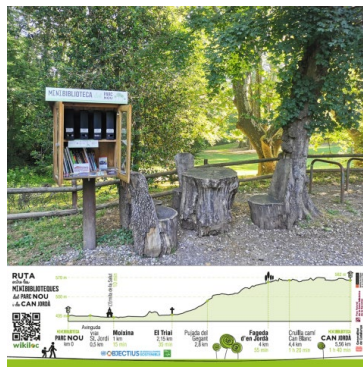
Congress of Evolutionary Patchwork. Initiative in which 160 students from the 4thESO participate, from the subject Applied Science and Biology and Geology, where they present scientific posters related to the evolution of species. The Documentation Centre forms part of the jury that evaluates the posters and their oral presentation.

7. Feeling nature

Library Escola Collserola in Sant Cugat del Vallès

Garden of Smells. It is a relaxed space, in contact with nature and the environment, where the library organises approaches among nature, libraries and books. The students experience a new way of reading and the vision of the school library is broadened, ceasing to be a closed space to be an open space.

Documentation Centre from the Natural Park of the Volcanic Area in Garrotxa, Olot, Girona.



Mini-libraries, which connect the two branches of the Park on an itinerary that crosses extraordinary landscapes such as the Moixina wetlands or the famous Jordà beech forest. They are used as a resource so that, in complicity with the teachers, schoolchildren find more information about the park, volcanism, some kind of fauna or flora, or different rewards depending on the topic discussed in class or the environmental event being celebrated at that time.

Documentation Centre and Resources for Environmental Education in Cantabria(CEDREAC)



Provoca. This program proposes activities integrated with the curriculum, carrying out outings to nature, outside the educational centre, with the aim of raising students awareness by reconnecting with nature, valuing the natural heritage and collaborating in the prevention and solution of environmental problems. Various topics are addressed: the quality of rivers and seas, biodiversity, marine pollution, the problem of waste or the SDGs.

8. Sum up

The Green Libraries from RECIDA have been together for more than 20 years. Although many actions have been carried out to promote sustainability and spread the SDGs, we will continue to innovate and work to increasingly involve children and young people and the population in general in the common cause of the climate emergency and thus achieve a more sustainable and just world for all. Libraries are a great ally of education, games and entertainment and must

be present on the political agenda and in the associative network. In Spain, an important step has been taken by including them in the 2030 Agenda⁴ and there is a strategic group of Libraries and the 2030 Agenda created by the Library Cooperation Council and promoted by FESABID⁵. Other national associations such as SEDIC are also carrying out activities along these lines.

The future belongs to the young generations and we have the obligation to open the way for them.

Acknowledgements

We thank all the people of the Green Libraries Network who have worked and continue to work to make this network stronger and more innovative and in this way help children and young people and the population in general understand that sustainability is our concern. If we don't take care of the planet, we are not taking care of our health and well-being. The authors wish to thank Teresa Antolín (CENEAM, Segovia), Teresa Canyelles (CDRE, Collserola), Isabel García (MITMA), Yolanda Monteiro (SDEA, Barcelona), Elena Morato (AEMET, Madrid), Miguel Navas (MCNB, Barcelona), Chelo Pons (ONUBIB, Valencia), Silvia Rabat and Josep Melero (Diputació Barcelona) for their kind support to this article.

References

Grabolosa, M., & Toril, R. (2019, May 16-17). Aportación de los centros de documentación ambiental al horizonte de los Objetivos de Desarrollo Sostenible (ODS) 2030. [Poster presentation]. XVI Jornadas Españolas de Información y Documentación, Barcelona, España. <https://bit.ly/3LlMWj4>

Pons, C. (2018, October 17-19). Acceso a los recursos de información ONU: los ODS y las Bibliotecas. [Communication]. XVII Seminario de Centros de Documentación Ambiental y Espacios Naturales Protegidos, Zaragoza, España. <https://bit.ly/3wAjvG2>

RECIDA. (2019, October 24). Guía Acciones ODS. RECIDA. Congreso sobre los Objetivos de Desarrollo Sostenible de Naciones Unidas, Valencia, España. <https://bit.ly/3yCsJTB>

RECIDA. (2019, December 2-13). El Objetivo N°13 : el último desafío. [Poster presentation]. Conferencia de las Naciones Unidas sobre el Cambio Climático (COP25), Madrid, España. <https://bit.ly/3wgGXl0>

RECIDA. (2021). The Spanish Network of Green Libraries working for Sustainability. IFLA Green Library Award. Runner-up Green Library Project. <https://bit.ly/3N87Enw>

Red de Centros de Información y Documentación Ambiental RECIDA. (2022). XVI Premio Nacional SEDIC a la Calidad e Innovación Carmen Rodríguez Guerrero. SEDIC. <https://bit.ly/3QoVwBo>

Toril, R. Bibliotecas Verdes por el Clima (RECIDA). Tesoros para cambiar el mundo: Agenda. (2 de diciembre de 2019). Centro Nacional de Educación Ambiental (CENEAM). <https://bit.ly/39x8axA>

Toril, R. & Pons, C. (2021). La sostenibilidad en el corazón de RECIDA. *Gato de Biblioteca*, 4, 37-40. <https://asociacionabdm.org/wp-content/uploads/2022/01/Boleti%CC%81n-4.pdf>

Toril, R. & Antolín, T. (2021, October 20-22). *Ratones de bibliotecas verdes: libros y proyectos ODS*.

⁴ Sellés Carot, A. & Martínez González, B. (Eds). (2021). La implicación de las bibliotecas españolas en la Agenda 2030. Ministerio de Cultura y Deporte. <https://bit.ly/3O5gaVK>

⁵ Library Cooperation Council.(2022). Strategic group of Libraries and the 2030 Agenda. Ministry of Culture and Sport. <https://bit.ly/3OtWn29>

[Communication]. XX Seminario de Centros de Documentación Ambiental y Espacios Naturales, Valsain (Segovia), España. <https://bit.ly/37RQ7BB>

Toril, R. (2015, May 28-30). *¡Oscar conseguido!*. XIV Jornadas Españolas de Documentación. Ministerio para la Transición Ecológica y el Reto Demográfico. <https://bit.ly/3mULjiN>

Tramullas, J. (2016, May 26). En el XV Seminario RECIDA. Tramullas.com Blog de Jesús Tramullas. <https://tramullas.com/en-el-xv-seminario-recida/>
