



# Community Engagement for Water and Biodiversity

**Liz Gabbett**

Maigue Rivers Trust

and

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Mary Immaculate College  
University of Limerick

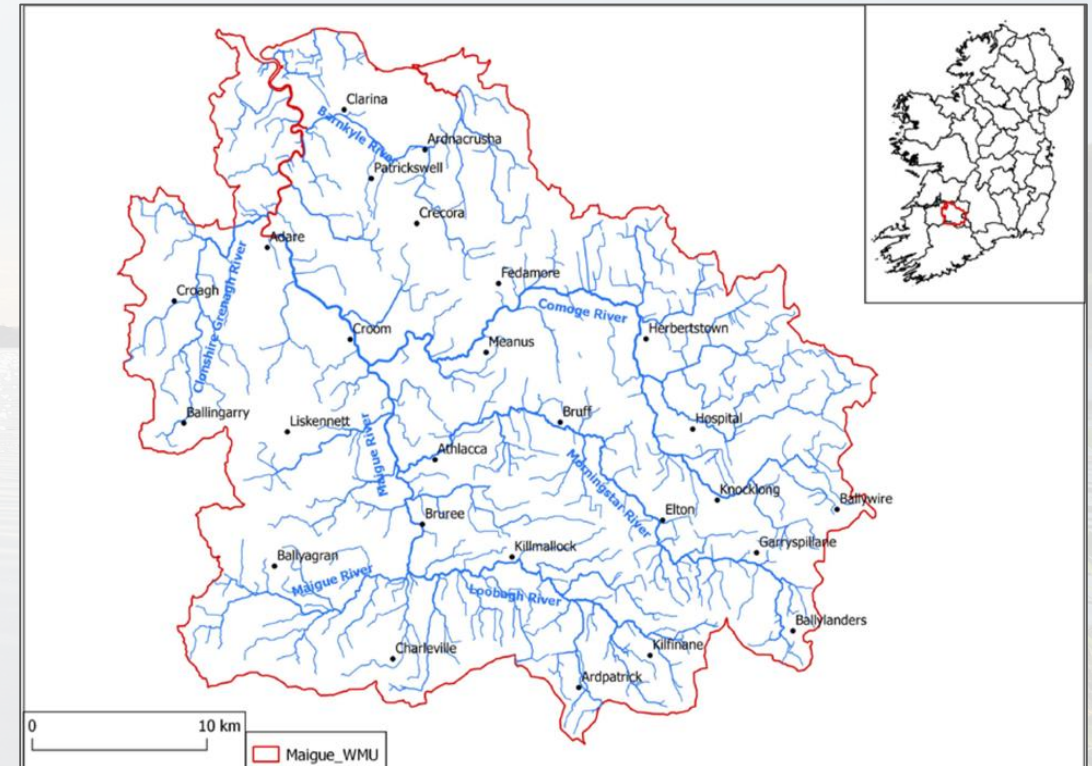


**Established in 2016**

**Registered Charity and CLG since 2018**

### Main Aim

To work with local communities to ensure that the rivers and lakes of the Maigue catchment can achieve their full potential both environmentally and recreationally



Located in Counties Limerick, Cork and Tipperary

### Main Funders:



An Roinn Tithíochta,  
Rialtais Áitiúil agus Oidhreachta  
Department of Housing,  
Local Government and Heritage



The Rivers Trust



Comhairle Cathrach  
& Contae **Luimnigh**  
Limerick City  
& County Council



Rialtas na hÉireann  
Government of Ireland



Rialtas na hÉireann  
Government of Ireland

Tionscadal Éireann  
Project Ireland  
2040



In 2019, Dr Catherine Dalton, director for MRT and MIC Environmental Geography lecturer, formed a research partnership between MIC and MRT to investigate the role and impact of **Citizen Science in River Environmental Stewardship - 'CSI-Rivers'**

Survey:

## Connections, concerns and caring for your local river

**PhD candidate: Donna Weiner**

**Funding:**

EPA Scholarship 2019-W-PhD-15 and MIC-UL Dept. Assistantship

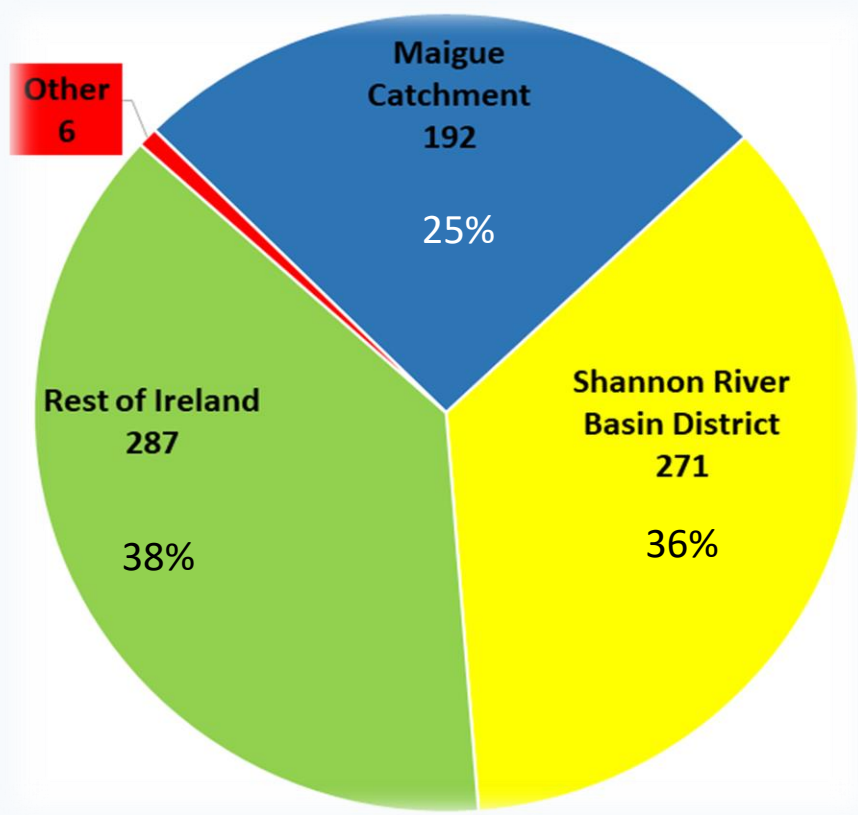
**Supervisors:**

Catherine Dalton and Julian Bloomer, MIC-UL

**Funders:**

# An interdisciplinary socio-ecological study aimed at improving river catchment water quality using citizen science

Survey Respondents Residence (n=756)



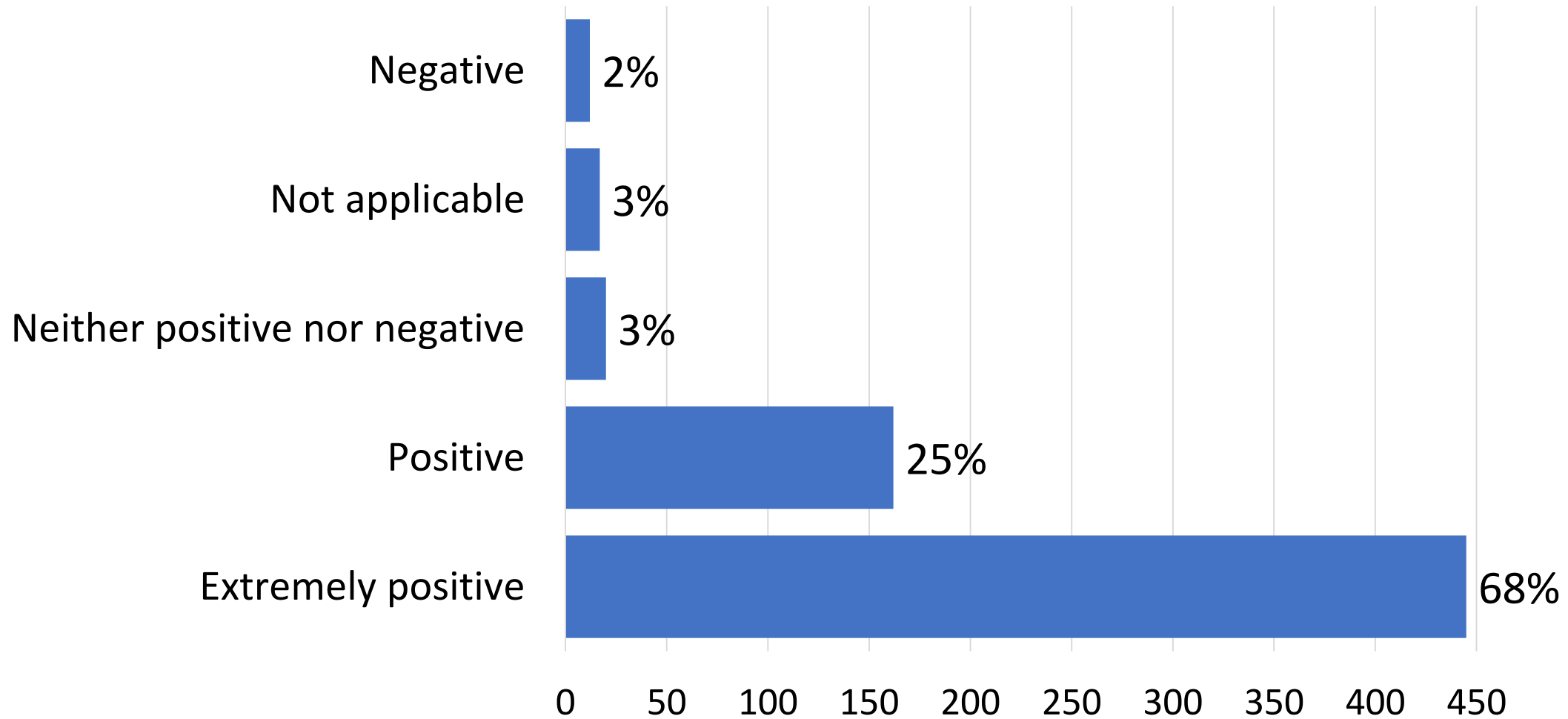
Gender Profile	
Female	62%
Male	38%

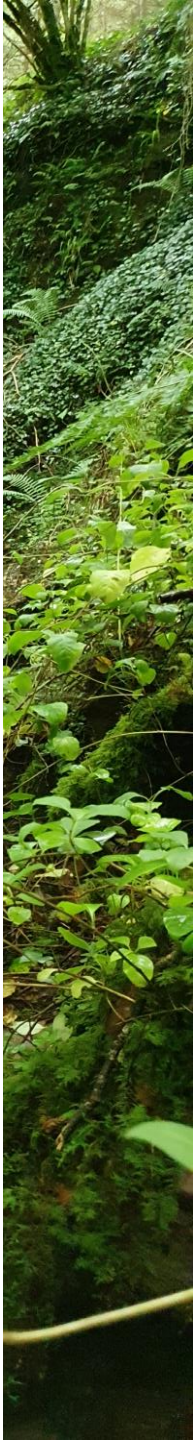
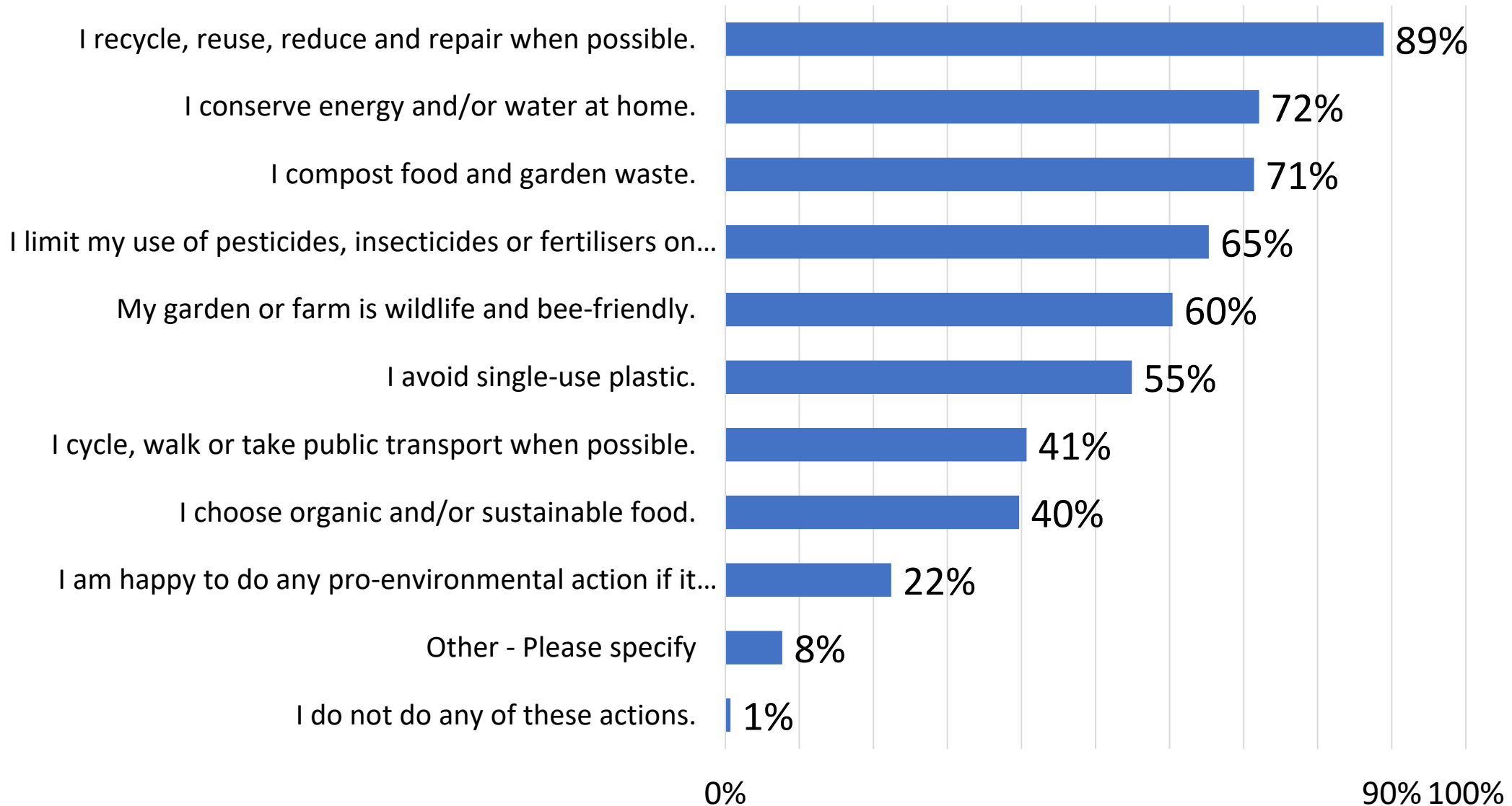
Age Profile	
18-29	9%
30-49	40%
50-65	41%
>65	10%

Rural & Urban Profile	
Rural	43%
Village	18%
County town	15%
City	23%

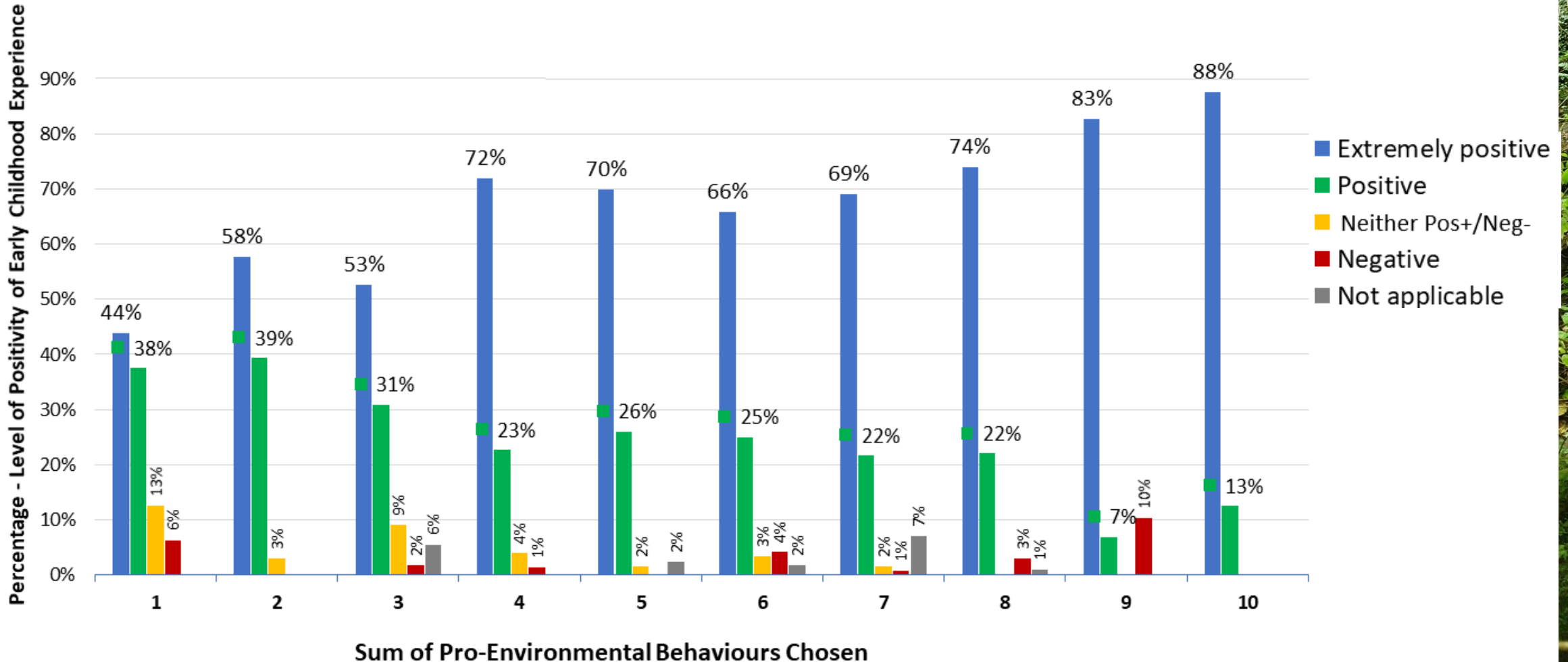
# Your earliest childhood memory in nature: Was it a positive or negative experience? (n = 745)



# Pro-Environmental Behaviours

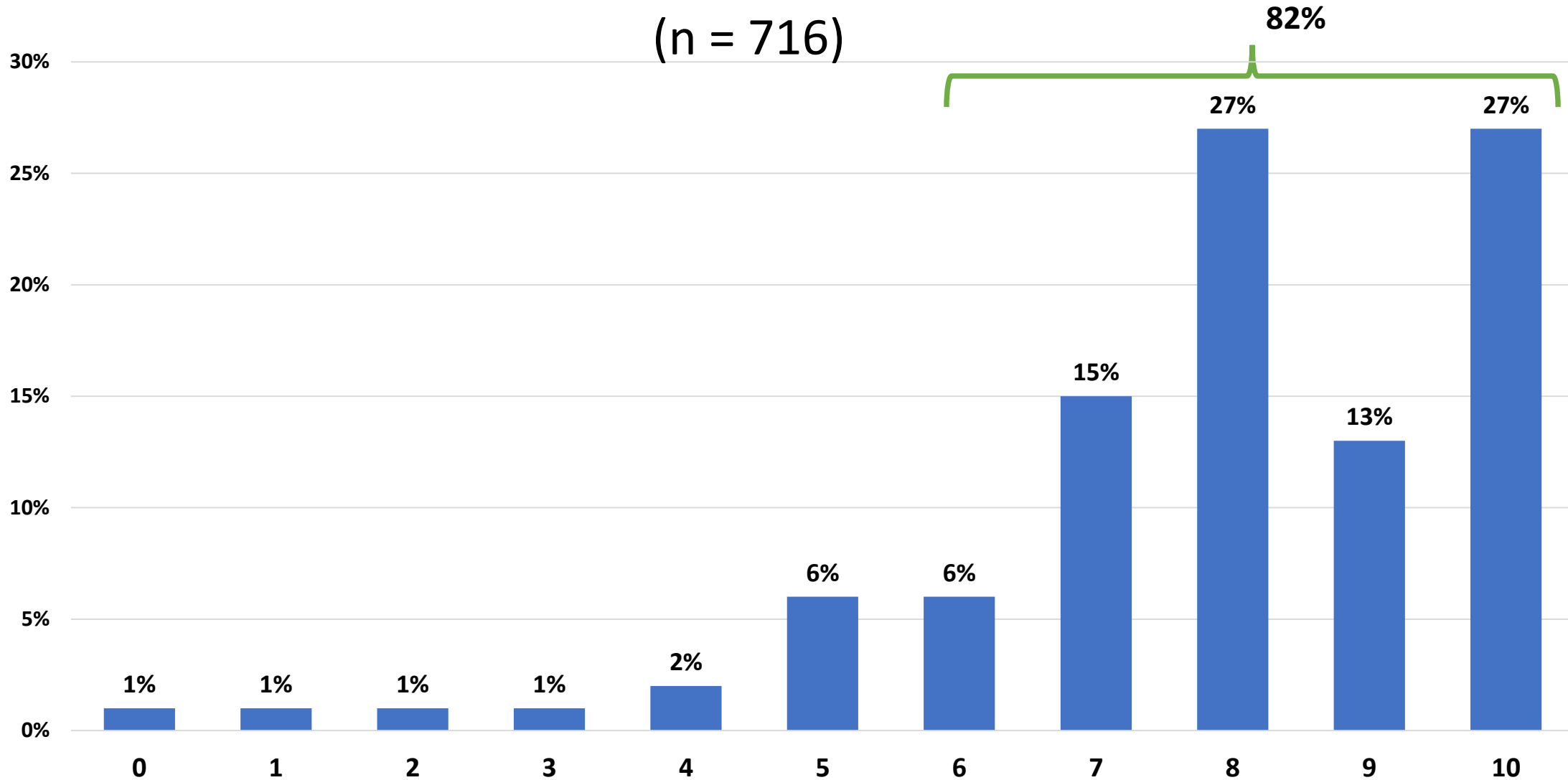


# Positivity of Early Childhood Nature Experience vs. Sum of Pro-environmental Behaviours



# On a scale from 0-10, how spiritually or emotionally connected do you feel to nature?

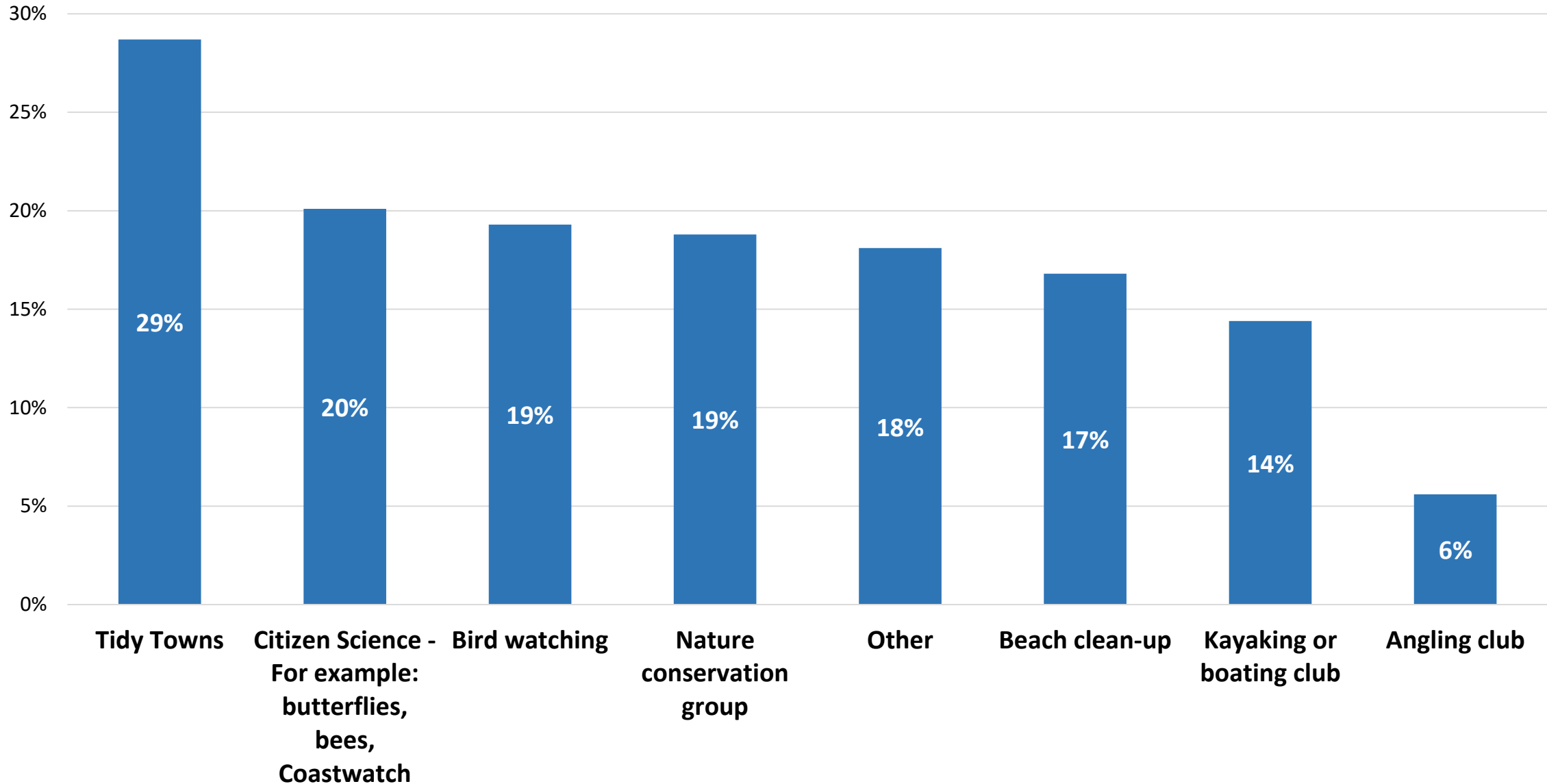
(n = 716)



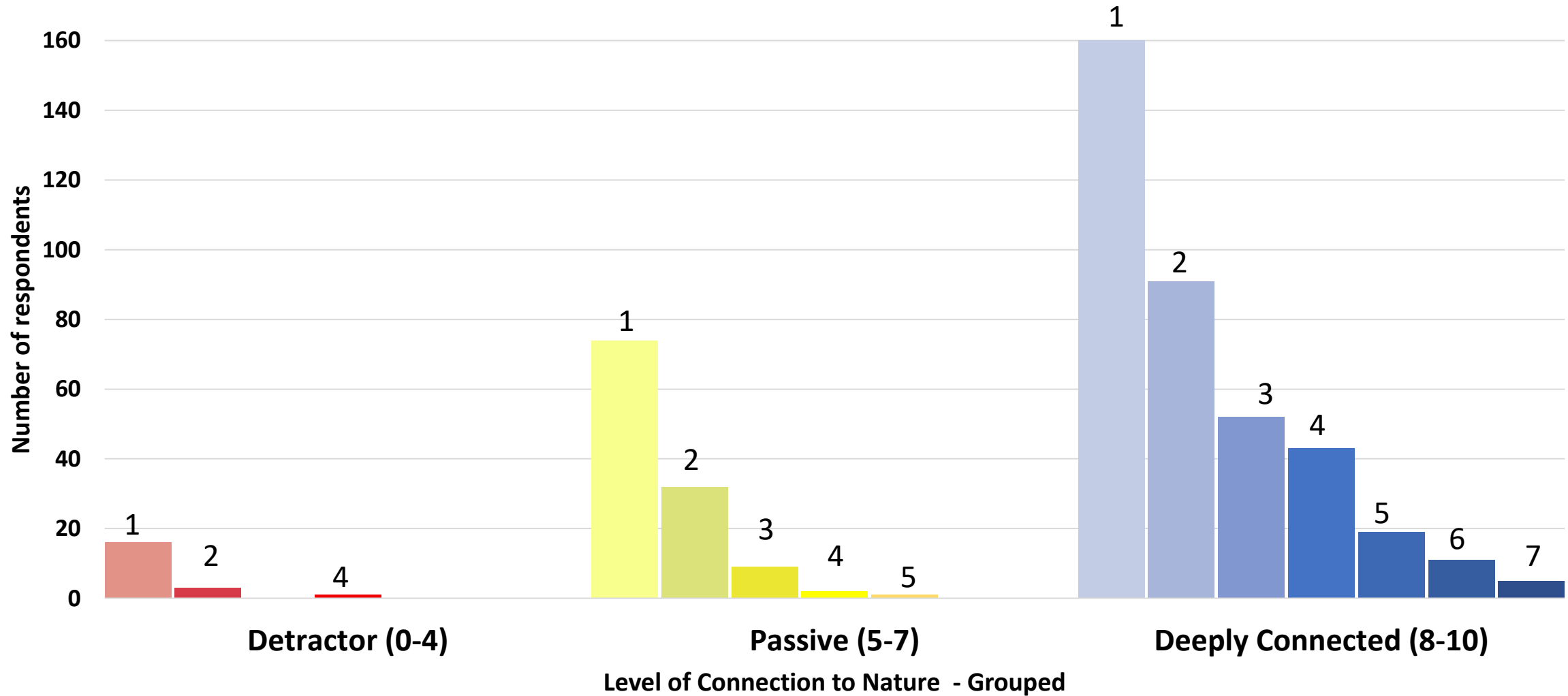


# Participation in community or conservation group

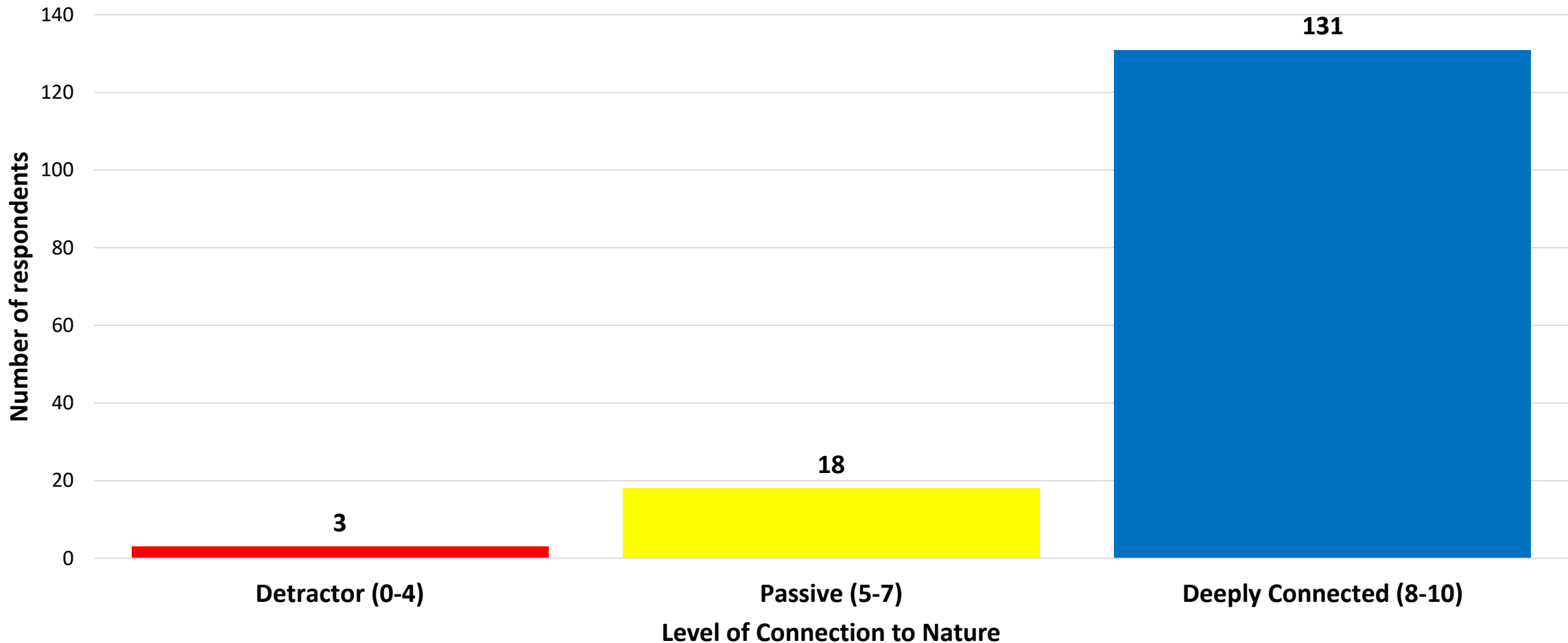
(n = 756)



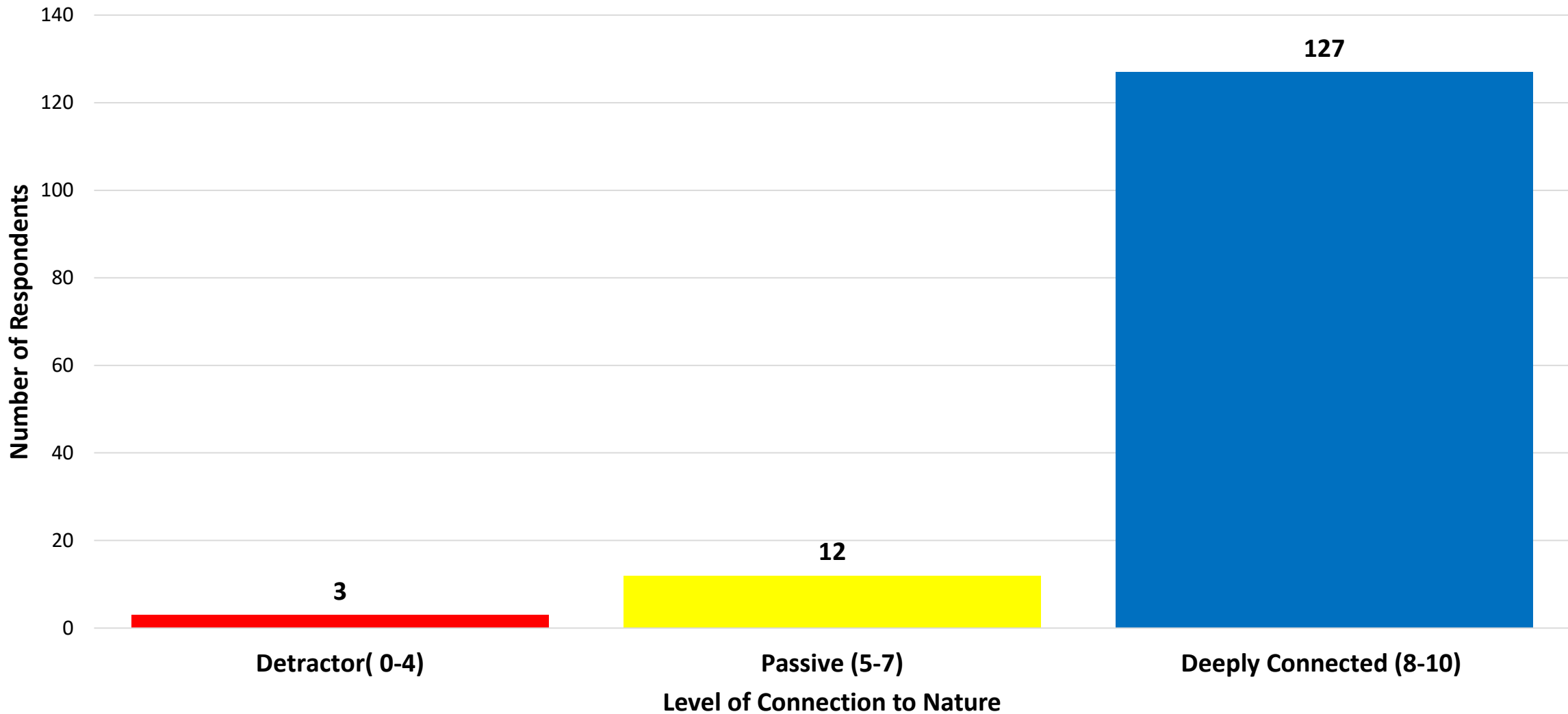
# Level of Connection to nature and the Sum of community or conservation groups chosen (n = 521)



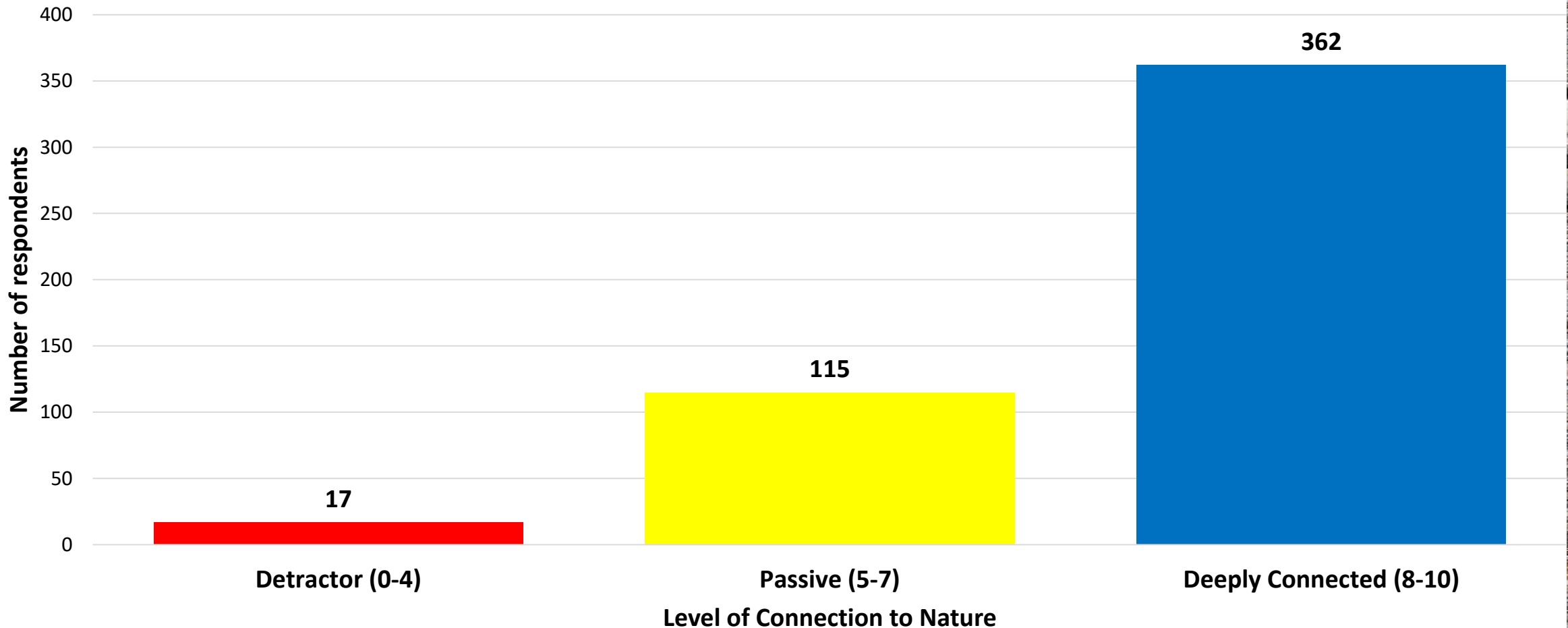
# Level of connection to nature and Participation in citizen science e.g. Bees, butterflies, birds, Coastwatch, etc. (n = 152)



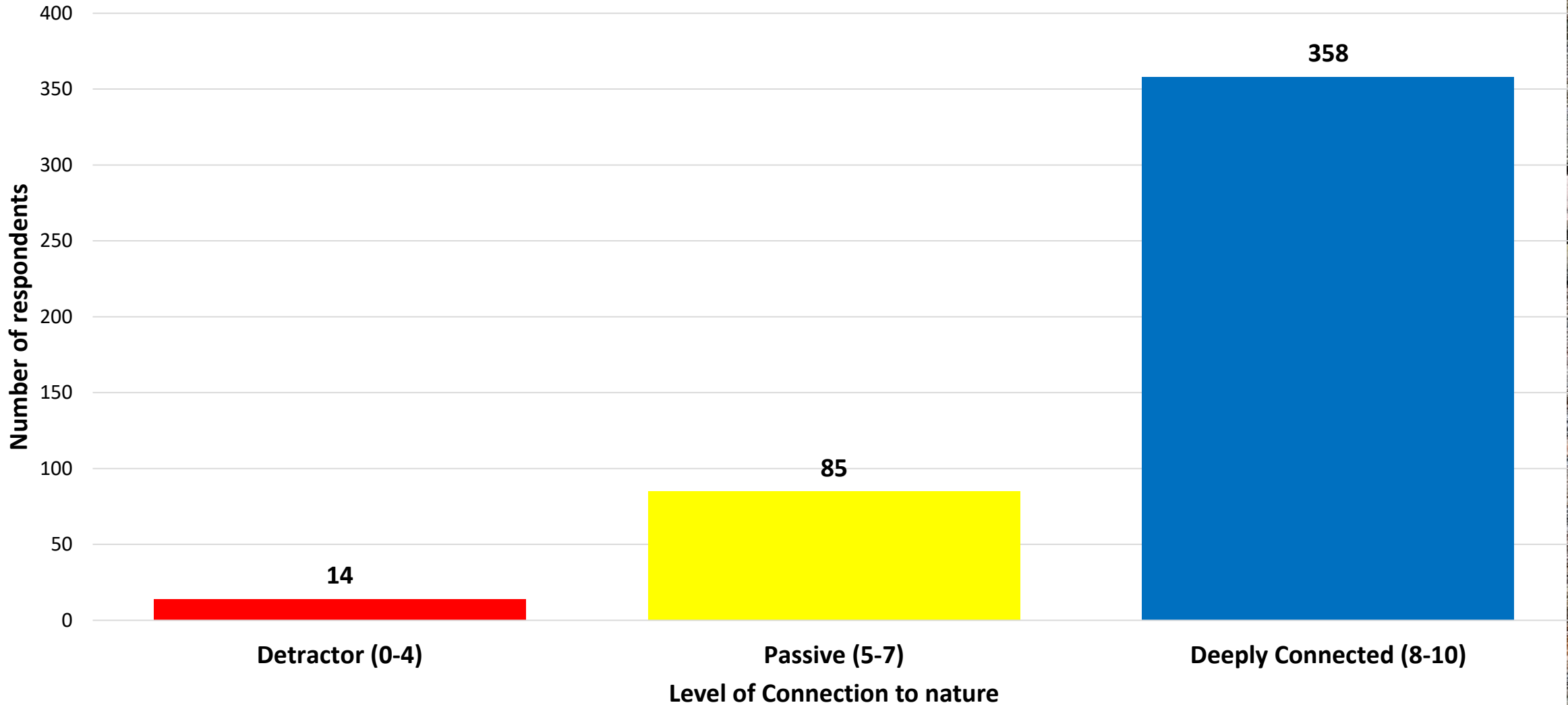
# Level of connection to nature and Participation in nature conservation group (n = 142)



# Connection to nature and pro-environmental action: I limit my use of pesticides, insecticides or fertilisers on my lawn or farm (n = 494)



# Connection to nature and pro-environmental action: My garden or farm is wildlife and bee-friendly (n = 457)





Citizen Science and Education Outreach Projects

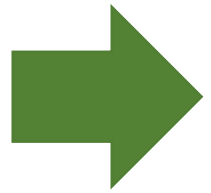
# Why Use Citizen Science?

MRT Objective 1

– **to educate and engage local communities with their local rivers and streams**

MRT Objective 2

– **to collect environmental data from around the catchment**



**To build the public's understanding of the interdependency of species and their habitat requirements, and actively care for the natural environment.**







# MIC & MRT Research Findings

People are interested in knowing more about the nature of rivers and how to monitor local water quality.

**Co-design is a key component of our engagement and getting buy-in strategy**

However, many people are hesitant about working in water

- safety - stability in water - water quality concerns - the unknown of what is below the water surface

In addition, species identification requires expert consultation and practice to gain confidence in their ID ability



# MIC & MRT Research Findings



The **Freshwater Watch** project allows people to collect water samples and observational data without having to enter the water



**CSSI** is for the more adventurous and confident in their species ID

**Both projects are compatible**



# Community Events



Charleville



Granagh



Lough Gur

In collaboration with LAWPRO, IFI, Community Groups & Tidy Town Groups



# Training Events



invites you to learn

## How to recognize Giant Hogweed?

When: Wednesday 15<sup>th</sup> Sept, 11am-12 midday  
 Meeting point: Elton village, car park by the Old pub  
 Instructors: Dr Tom Harrington & Liz Gabbett of the Maigue Rivers Trust

On Wednesday 15<sup>th</sup> of Sept at 11am, Tom and Liz will be in Elton to meet with farmers and landowners to show them how to recognize Giant Hogweed from other plants and to discuss the necessity for a long-term project to get giant hogweed on the Morningstar under control.

Giant Hogweed is a dangerous invasive weed that is found along the Morningstar River from Elton to Gormanstown South and it is spreading downstream. Liz and Tom have carried out a survey of the entire river over the past 2 weeks and they have identified the locations of weed along the river.

Knowing how to recognise giant hogweed from native hogweed, angelica, butterbur and other plants is the first step in getting the spread of the weed under control.

National Biodiversity Action Plan 2020-2021  
 National Park & Wildlife Service  
 An Roinn Tábhcíochta, Rialtais Aintírl agus Oidhreacht Department of Housing, Local Government and Heritage  
 Contraceptive Cathrún & Conair Lúimnigh Limerick City & County Council



Giant hogweed

Angelica

Native hogweed



Elton

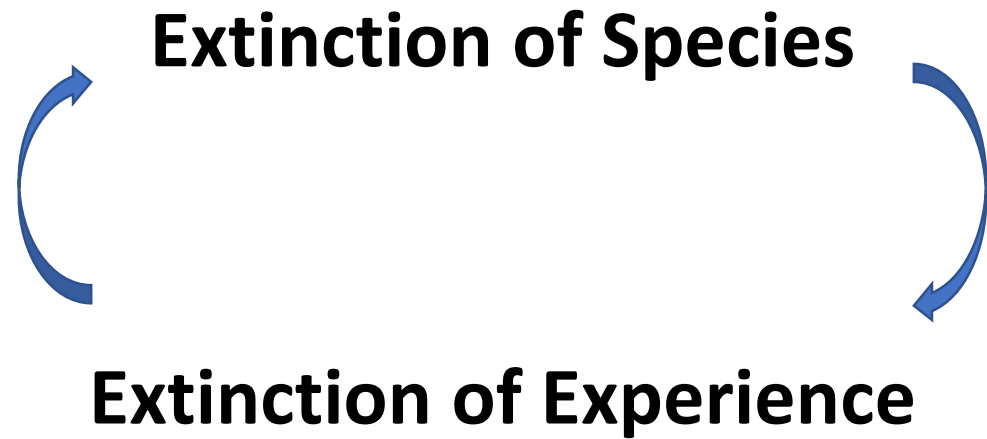


# The Value of Providing Nature-based Community Engagement Opportunities

**Positive Early Childhood Nature Experiences**

**= Increases Environmental Actions in Adulthood**





**The innate human instinct to connect with nature and other living beings**  
—Edward O Wilson, 1984

**MRT is working to prevent the loss of opportunities  
to experience nature**



White-clawed crayfish

# What needs to be done going forward.

Citizen science projects are **multi-annual projects**.

Local authorities often provide **financial support** and **practical supports** to Rivers Trusts and eNGOs to enable us to provide nature-based events and coordinate citizen science projects.

However, the funding opportunities need to allow for **inclusion of essential core costs**, e.g. wages, insurance, etc. if we are to deliver these events in the long-term and **be sustainable**.

 **iCatch Network** 15 catchment organisations from across Ireland



Stonefly  
Perla bipunctata



**Thank you.**

**Any Questions?**

**Liz Gabbett**

Maigue Rivers Trust

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