



Future Rangers Program

June
2020

Process and Resources*

Special thanks to the National Geographic Society for supporting this project

*This document is a living document and will change and grow as new information, feedback and research becomes available

1 Introduction	3
1.1 Purpose of this plan	3
1.2 Program summary	3
2 Program Basics	4
2.1 The Future Rangers Cycle (what we do)	5
2.2 Why	6
3 Our Process	7
3.1 Stages and Learning	8
3.2 Scaling	10
3.3 Implementation	11
3.4 What Makes Us Different?	12
3.5 Sustainable Development Goals	12
4 Logical Framework	13
5 Indicators	16
6 Roles & Responsibilities	19
7 Data Flow	20
8 Data Management	21
8.1 Storage	21
8.2 Analysis	21
8.3 Privacy	21
Citations	22
Appendices	23
Semi-Structured Interview Guideline	23
Future Rangers Theory Logic Model	24
National Geographic Learning Framework	25
GCC Data Collection App Map	32
Social Science Training Tools	32
Test for Baseline Conservation Knowledge	32

1 Introduction

1.1 Purpose of this plan

The purpose of this document, prepared by the Global Conservation Corps (GCC), is to demonstrate to relevant stakeholders, including partners, funders, and interested parties, GCC's rationale and resources towards the intended impact of the Future Rangers Program. The objective of this plan is to keep GCC accountable to stakeholders and most importantly, to create a formative evaluation of the program that can adjust as the program progresses in order to create maximum impact in the war against poaching. Monitoring and evaluation, combined with the programs logic model and high impact school selection framework will ensure that this program is reaching the right areas and adjusting to challenges that will undoubtedly arise as the program progresses. Tracking the program is one part of a larger plan to provide opportunities to youth, reducing unemployment and sparking passion for wildlife.

1.2 Program summary

Title	Future Rangers Program
Starting Date	January, 2019
Duration	Ongoing
Partners	Southern African Wildlife College, Africa Foundation
Target Area	Western border of the Kruger National Park, South Africa - Potential to scale
Beneficiaries	Community youth populations, specifically in high-poaching risk areas
Cost	\$500 USD per school per month, plus Program Manager salary (\$30,000 USD annual)
Funding Source	National Geographic Society, Local lodges, Private donors, Corporate donors
Goal	To bridge the gap between communities and wildlife

2 Program Basics

2.1 The Future Rangers Cycle (what we do)

THE FUTURE RANGERS CYCLE



The Future Rangers Cycle (what we do)

■ We focus on youth living alongside high priority conservation areas

- 1 Inspire passion and connection with wildlife, because all children deserve a chance to fall in love with the natural world, starting at age five - all students in participating Primary Schools
 - In class conservation lessons weekly, yearly game drives with guides from their communities to see wildlife, place-based and hands-on learning and experiences
- 2 Identify the most passionate and dedicated students through the use of the Future Rangers App, and, in secondary school, focus on hard and soft skills and leadership training with these students
- 3 Work with community partners and the local wildlife economy to match these students with work shadowing opportunities, internships and jobs or higher education upon graduation
 - The Future Rangers Scholarship Program funds learners with the most passion, talent and ambition to pursue conservation careers by granting further education and learning opportunities once completing high school.
- 4, 5, 6 This ensures that the wildlife economy is hiring locally, so income generated goes back into communities, wildlife jobs are able to get passionate, well-trained local staff, and young people can benefit directly from their love for wildlife and the natural world. This method ensures tomorrow's leaders have an appreciation for the value of wildlife and the natural world.



2.2 Why

THE CURRENT STATE OF CONSERVATION:

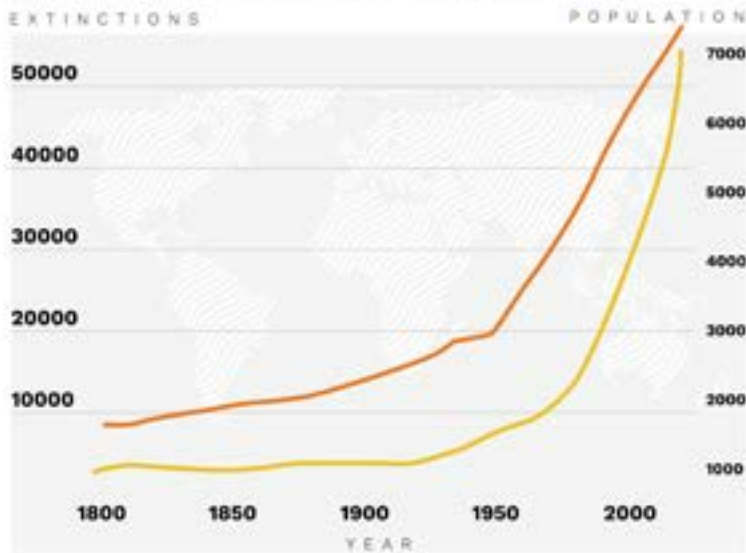
We are currently undergoing the 6th mass extinction -

1 MILLION

species (flora and fauna) are threatened with extinction

The future of wildlife lies with our next generation of leaders

HUMANS & THE EXTINCTION CRISIS



Data source: Scott, J.M. 2008, *Threats to Biological Diversity: Global, Continental, Local*. U.S. Geological Survey, Idaho Cooperative Fish and Wildlife Research Unit, University of Idaho

We focus our programs in areas with rapidly growing youth populations and vulnerable wildlife populations



MEDIAN AGE
Teens Twenties Thirties Forties

Source: CIA Factbook, Credit Suisse Global Vantage

THE CHALLENGE:



Balancing rapid human development with the conservation of our planet - humans need nature to survive - but unfortunately human development has seen the depletion of natural resources and wildlife in areas where the populations have had little to do with that depletion, but are suffering the majority of the consequences.

OUR SOLUTION: working in these communities towards sustainable development that simultaneously benefits people and wildlife

LISTENING TO WHAT'S NEEDED:

GCC works in areas with disappearing rich biodiversity alongside areas of rapid human development and tourism

Current work along western border of Kruger National Park

- 2.4 million people living alongside Kruger National Park
- 50% of that population are youth
- 4 out 5 youth polled have never seen the "Big Five"
- We work with existing stakeholders and community partners, in order to conduct regular needs assessments and ensure we are centering local voices and leaders

TOTAL POPULATION BY AGE GROUP IN SOUTH AFRICA



Source: Censusway Survey 2010, World Population (2010), 2010, Available at: <http://worldpopulationreview.com/population-statistics/2010-world-population/>

TAKING IT A STEP FURTHER

Through the Future Rangers Program, we not only provide consistent conservation education which is locally led, we also work to ensure our graduates are able to find employment within their local wildlife economy, benefiting directly from a thriving wildlife population and putting their passion into action

HOW DOES THIS HELP WILDLIFE?

Local-level employment in the wildlife economy brings direct revenue back into communities -> Community members who aren't struggling financially are less likely to poach

Future Rangers Youth moving into leadership positions have a deep appreciation for the natural world and its value (economic, intrinsic and instrumental), meaning there will be greater incentive in the future to protect these areas.

Happy people = happy wildlife



3 Our Process

The Future Rangers Program is designed to tackle the gap between communities and opportunity generated by the wildlife economy, starting from a young age. We do this in three research-supported steps;

1. Primary school; classroom and outdoor based lessons and exposure to wildlife
 - A. Types of learning addressed at this level:
 - i. Experiential
 - ii. Place-based learning
 - iii. Visual
 - iv. Auditory
 - v. Kinesthetic
 - vi. Reading/Writing
 - vii. Play-based learning
 - viii. Classroom learning

Note: GCC works with partners to help address [Maslow's Hierarchy of Needs](#), ensuring basic needs are met so that Future Rangers can focus on psychological and self-fulfillment needs through our programming.

(See graphicon following page)

OUR MODEL



Stages and Learning



Primary school: Classroom and outdoor based lessons and exposure to wildlife

Secondary school: Skills and leadership development



Employment and Higher Education: Tracks to higher learning and internships and jobs within the wildlife economy

1. note* not *everyone* is passionate about wildlife - we provide the opportunity to engage with wildlife for all students in our program, and work over time to identify and upskill the students hoping to pursue that type of career - whichever career you choose, an appreciation for nature is vital

Scaling



Focal areas chosen by proximity to high value conservation areas and presence of strategic partners



Schools selected through prioritization system using swing weighting and value hierarchy, looking at factors such as:

- Community investment
- Youth employment levels
- Poaching risk
- Existing environmental programs



Free use of Future Rangers (FR) App to conservation education organizations to streamline monitoring and evaluation (M&E), cut down on admin time to focus on what's important (education!), and to facilitate conservation curriculum sharing

What makes us different?



The App

1. Ed-tech FR App
 - a. Student lesson and activity tracking
 - b. Individual student notes - tracking stand-out students using the National Geographic Learning Framework
 - c. Digital conservation curriculum library



Innovative M&E

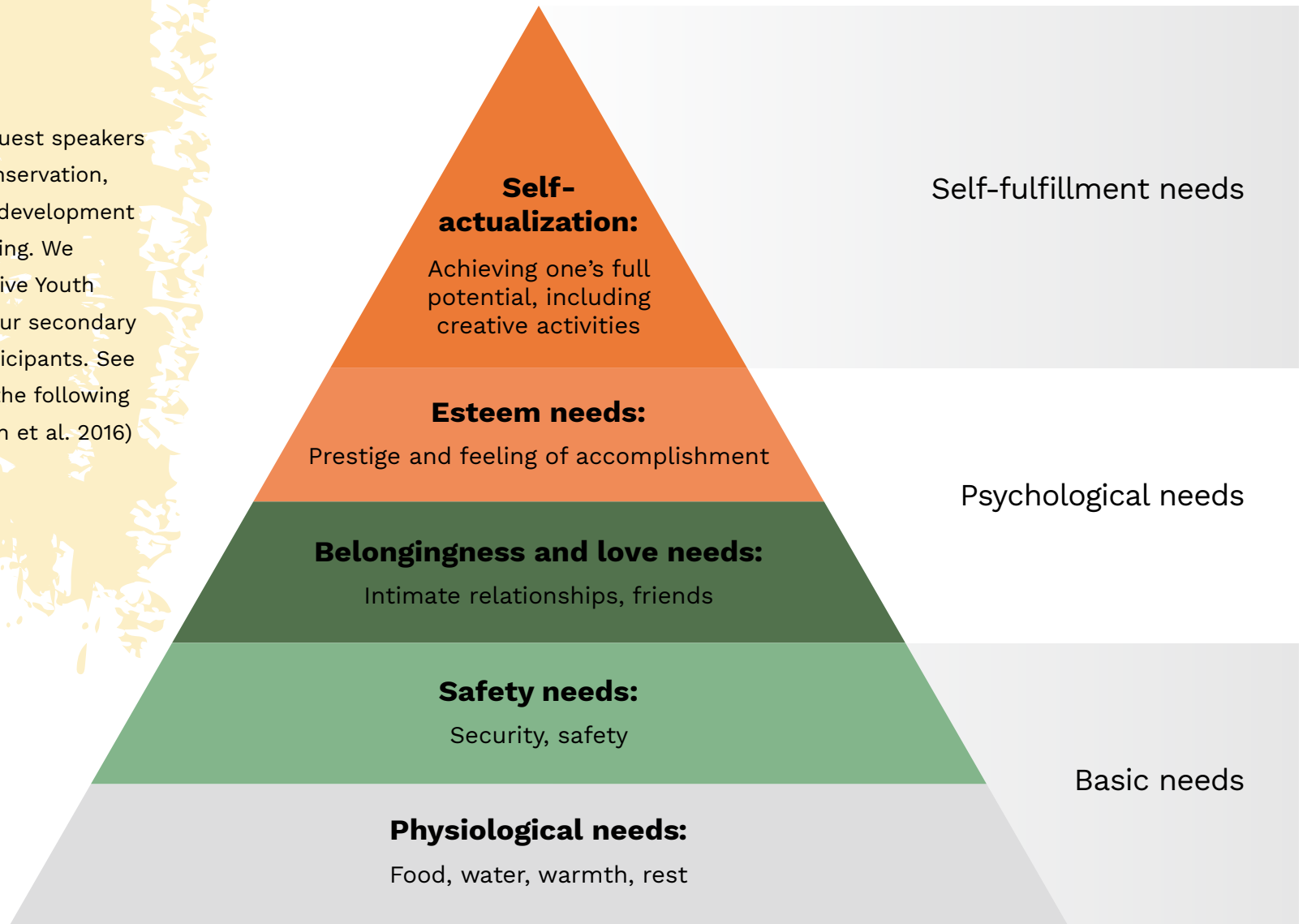
1. Pre and post assessments focused on knowledge, values, attitudes, behaviors
2. Randomized Control Trials (RCT) with neighboring schools



Tracking towards employment and tangible benefits

1. Generated portfolio of evidence (through app) for graduating students (think 'linkedin profile' for new graduates)

2. Secondary school; guest speakers from the field of conservation, hard and soft skills development and leadership training. We are striving for Positive Youth Development with our secondary school program participants. See USAID's graphic on the following page (Source: Hinson et al. 2016)



(Relevant Resources include: [Maslow's Hierarchy of Needs](#); The Last Child in the Woods, Richard Louvre, Amjad et al. 2013, and [NAAEE's Guidelines for Excellence in EE series](#))

ASSETS

- Training
- Formal education
- Interpersonal skills (social and communication skills)
- Higher-order thinking skills
- Recognizing emotions
- Self-control
- Academic achievement

CONTRIBUTION

- Youth engagement

Healthy, Productive and Engaged Youth

AGENCY

- Positive identity
- Self-efficiency
- Ability to plan ahead/Goal-setting
- Perseverance (diligence)
- Positive beliefs about future

ENABLING ENVIRONMENT

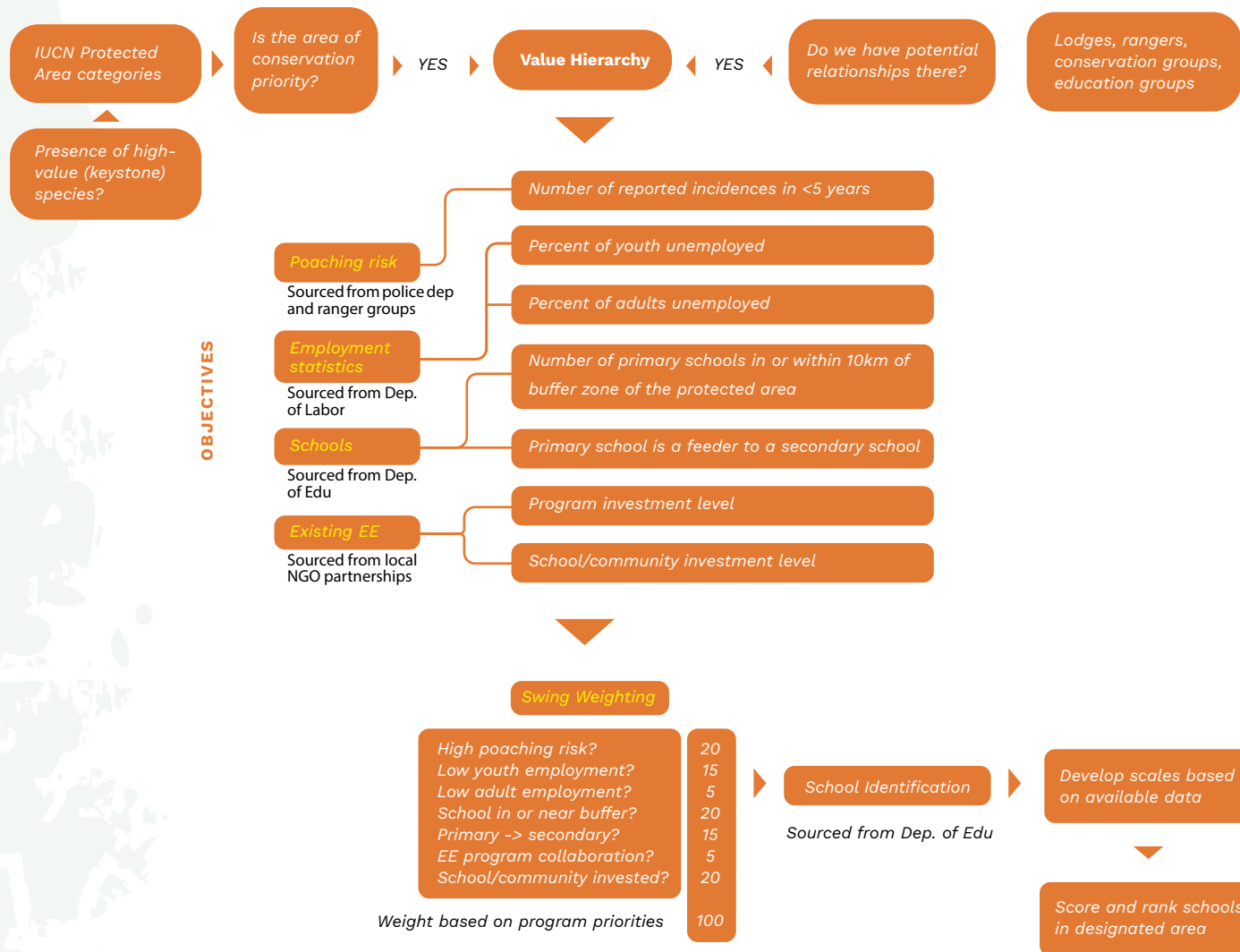
- Bonding
- Opportunities for prosocial
- Support
- Prosocial norms
- Value & recognition
- Youth-responsive services
- Gender-responsive services
- Youth-friendly laws and policies
- Gender-responsive policies
- Physical safety
- Psychological safety

(Hinson, L. et al. (2016). Measuring Positive Youth Development Toolkit: A Practical Guide for Implementers of Youth Programs. Washington DC.)

3. Practical application of learning, employment tracks and internships within the local wildlife economy (Relevant resources include: USAID Positive Youth Development Toolkit (Hinson et al. 2016))

3.2 Scaling

- Areas of conservation priority (see school prioritization system)
- Free use of FR App to conservation education organization to streamline monitoring and evaluation, cut down on administration time to focus on what's important (education!), and to facilitate conservation curriculum sharing



3.3 Implementation

Getting the program started includes parent/guardian prior informed consent, as well as assent for learners over 13 years old, in regards to data collection, implementation of a grade-appropriate baseline survey focusing on knowledge, attitudes and behaviors, and FR App on-boarding. See below for sample timeline.

FR IMPLEMENTATION

Kate Vannelli | April 26, 2020

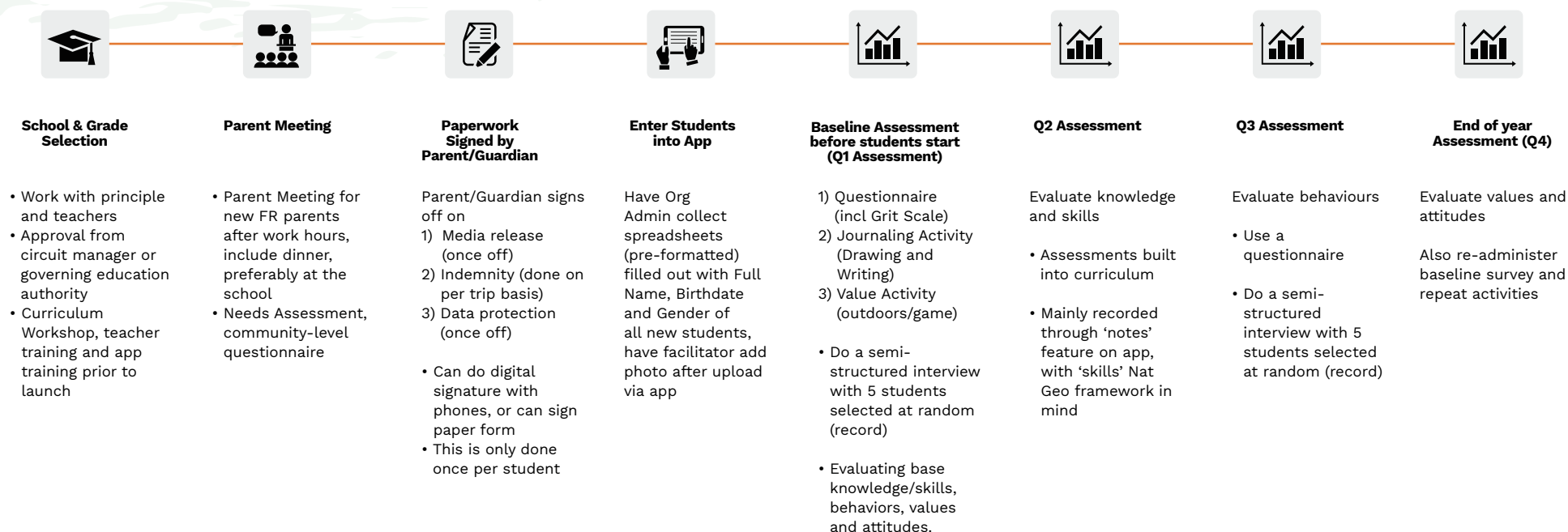
Q1

Q2

Q3

Q4

Activities throughout the year include but are not limited to: Weekly conservation lessons in-classroom, excursions including game drives, wildlife rehab center, national park and bush camps, guest speakers, service learning projects, job shadows, internships, etc.



3.4 What Makes Us Different?

- Ed-tech FR App
 - Student lesson and activity tracking
 - Individual student notes - tracking stand-out students using the National Geographic Learning Framework
 - Digital conservation curriculum library
 - Generated portfolio of evidence for graduating students (think 'linkedin profile' for new graduates)
- Innovative M&E
 - Pre and post assessments focused on knowledge, values, attitudes, behaviors
 - Randomized Control Trial (RCT) with neighboring schools
- Tracks to tangible benefits (ie employment)

3.5 Sustainable Development Goals

- The Future Rangers Program is an official partner program of the UN Sustainable Development Goals. The program works towards the sustainable development goals in the following areas:

- **7 Goals and 15 Targets**
 - **Goal 4:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
 - **Goal 5:** Achieve gender equality and empower all women and girls
 - **Goal 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
 - **Goal 10:** Reduce inequality within and amongst countries
 - **Goal 12:** Ensure sustainable consumption and production patterns
 - **Goal 13:** Take urgent action to combat climate change and its impacts
 - **Goal 15:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



4 Logical Framework

	PROJECT SUMMARY	INDICATORS	MEANS OF VERIFICATION	RISKS/ ASSUMPTIONS
Goal	Bridging the gap between communities and wildlife	Portfolio of evidence per graduate and post graduation career tracking	Portfolio of evidence created over time through app, career tracking done through follow-ups with individual and placement location	Passion encouraged and jobs provided will reduce poverty and therefore poaching, bringing communities closer to their wildlife heritage
Outcomes	Higher community-level involvement and inclusion in conservation and stewardship of wildlife and nature through benefits/opportunities provided and passion encouraged and rewarded	Attitude and behavior change with participants, within community	Qualitative data collection through interviews, and facilitator data collection through app in specific regard to National Geographic's learning framework (traits identified and interviews recorded). Quantitative data collection through achievement tracking (app)	Passionate, local young people, given mentorship, training, and employment opportunities, will have a positive effect on poaching levels long term and add value to the wildlife economy
Outputs	Regular youth exposure to wildlife and protected areas that they were previously excluded from (1 trip per year to wildlife rehab and/or reserve per Future Ranger student)	Tracking student exposure to excursions and 'before and after' attitudes	GCC smart phone app to track quantitative and qualitative data through interviews.	Providing young community members with exposure to the wildlife economy through an incentive-based system will increase passion and skills around the wildlife economy
Activities	Primary school awareness building through classroom learning, secondary school skill building through after-school programs, internship and job placement at the end of secondary school.	Tracking student exposure to lessons and frequency	GCC smart phone app to track quantitative data	There is a lack of connection with wildlife and wilderness from a young age with local community members living alongside protected areas

Goal: To bridge the gap between communities and wildlife

Assumptions	Inputs	Activities	Outputs	Outcomes		Impacts
The problem or issue and the reasons for proposing the solution suggested in your program's approach.	Resources and/or barriers, which potentially enable or limit program effectiveness	The processes, techniques, tools, events, technology, and actions of the planned program.	The direct results of program activities	Specific changes in attitudes, behaviors, knowledge, skills, status, or level of functioning expected to result from program activities and which are most often expressed at an individual level.		Organizational, community, and/or system level changes expected to result from program activities
<p>There is a lack of connection with the wildlife and wilderness from a young age with local community members living alongside protected areas</p> <p>Providing young community members with exposure to the wildlife economy through an incentive-based system will increase passion and skills around the wildlife economy</p> <p>Passionate, local young people, given mentorship, training, and employment opportunities, will have a positive effect on poaching levels long term and add value to the wildlife economy</p> <p>Passion encouraged and jobs provided will reduce poverty and therefore poaching, bringing communities closer to their wildlife heritage</p>	<p>Data on school locations around protected areas, poaching risks, existing EE programs</p> <p>Invested school and school principal</p> <p>Local NGO partner for community engagement/presence</p> <p>Staff/Trained facilitators in environmental education</p> <p>Funders, \$500 per month per school</p> <p>Primary school curriculum, secondary school meeting locations and resources for excursions</p> <p>Wildlife economy partners to provide internships, placements, jobs upon graduation</p> <p>Higher education partner to provide additional training and higher education opportunities upon graduation</p> <p>Student tracking system for monitoring</p>	<p>Primary school (Primary school Grade R-7) - awareness building of wildlife conservation, by weekly taught lessons and activities in the classroom by a local facilitator, and occasional excursions and guest speakers</p> <p>Secondary school - Honing a smaller group of passionate students for service learning projects, debates, essay writing, frequent excursions to different sectors of the wildlife economy with guest lectures from various leaders in these sectors. Curriculum includes hard and soft skill development, leadership training and communication strategies, all with wildlife focus.</p> <p>Last two years of secondary school outstanding students are placed in job shadows, internships, learnerships, throughout various sectors, and are assisted with internships, higher ed and job placement upon graduation</p> <p>Inclusive community decision-making and involvement in program implementation and check ins periodically (working with school principals, non-profit partners (Africa Foundation, etc., and community leaders)</p>	<p>Immediate small-scale job provision in communities with hiring of program manager and facilitator staff (4 facilitators, 4 schools, 1 program manager)</p> <p>Direct engagement of community youth with passionate mentors on a weekly basis (1 facilitator reaches ~500 youth per week)</p> <p>Regular youth exposure to wildlife and protected areas that they were previously excluded from (1 trip per quarter to wildlife rehab and/or reserve per FR student)</p> <p>Increased conservation literacy and completion of service-learning projects with FR students (each student must complete an environmental community service project before moving to the next phase)</p>	<p>Short Term (1-3 years)</p> <p>Identification of a group of wildlife-passionate learners in the communities where FR operates</p> <p>General increased knowledge and awareness of conservation issues with FR learners, and some positive behaviour change around land and wildlife stewards</p> <p>Increased knowledge, and awareness of conservation issues within communities adjacent to protected areas through youth ambassadorship</p> <p>Higher levels of leadership, hard and soft skills to increase employability across sectors with FR learners</p>	<p>Long Term (4-6 years)</p> <p>A class of employable 'Future Rangers' who are passionate about wildlife, hardworking, and ready for jobs or higher ed in the wildlife economy</p> <p>Higher overall capacity, education and job placement within protected area adjacent communities, specifically FR graduates</p>	<p>Development of leaders in various sectors who have a connection to the natural world</p> <p>Lower poaching levels in protected areas adjacent to FR communities</p> <p>Higher community-level involvement and inclusion in conservation and stewardship of wildlife and nature through benefits/opportunities provided and passion encouraged and rewarded</p>
Our Beginnings		Our Planned Work		Our Intended Results		

5 Indicators

Indicator	Tracking student exposure to lessons and frequency
Definition	Sum of conservation lessons taught to each student within a school year.
Purpose	To measure the amount of regular exposure learners are having to conservation in a classroom setting.
Baseline	No base knowledge of or exposure to conservation.
Target	Exposure to, and a basic understanding of wildlife, conservation, and humans' impact on these.
Data Collection	Base 'test' given before lessons commence every year, results recorded in student profile, same or similar test given quarterly, to measure the lessons impact on the target, individual student improvement measured over time
Tool	GCC data collection app
Frequency	Quarterly
Responsible	GCC Facilitators
Reporting	The test results will be recorded in the GCC app by student profile. Data analytics will be performed once a year to measure individual student progress, and determine, with the help of the facilitators, which students stand out the most in the program and are eligible to move up at the completion of primary school
Quality Control	All facilitators will attend a one day training course on how to complete the assessment and enter data into the app. To verify the accuracy of the test scores submitted by the facilitators, the Program Manager will randomly select one class every six months to audit. This audit will involve re-testing all the students in the class and comparing the results to the results submitted by the facilitator.

Indicators

Indicator	Tracking student exposure to excursions and ‘before and after’ attitudes
Definition	Sum of program-related excursions each student is a part of, and interviewing students both before and after the excursion for attitude change
Purpose	To measure the effect of the excursions on students, and to track which students are most affected by the experience
Baseline	No exposure to conservation focused excursions and a pre-excursion interview to gather information on attitude towards conservation and wildlife
Target	Exposure to wildlife and the field of conservation in an experiential learning setting. Also, to gain an understanding on an individual level on which experiences impact which learners and how
Data Collection	Before and after interviews involving questions regarding attitudes towards conservation and wildlife
Tool	Interview questions are provided via GCC app, and interviews are recorded with smartphones, either video or audio depending on upload capabilities
Frequency	These interviews need to happen on any ‘first’ excursion i.e. first game drive, first wildlife rehab center visit, first conservation site visit, etc. and should also be done at least once a year per student
Responsible	GCC Facilitators and Program Manager
Reporting	The interviews will be uploaded onto GCC’s online platform through the app, and will be analyzed by GCC staff and students
Quality Control	Learners will need their parent/guardian to sign a release form for interviews. GCC app will have this release form available and facilitators should discuss logistics with the principle. Once signed, form should be scanned/photographed and uploaded with the interview recording.

Indicators

Indicator	Attitude and behavior change with participants, within community
Definition	Interviewing students annually to gauge behavior and attitude change, as well as interviewing key community members and parents of students to gauge attitude and behavior change within the community
Purpose	To measure the long-term impact, specifically attitude and behavior change, of the program on the participants and on the community the participants are a part of
Baseline	No interviews with community members connected to learners in the program
Target	Interviews, gauging attitude towards conservation, and relationship building with community members connected to learners in the program
Data Collection	Semi-structured interviews involving questions regarding attitudes towards conservation and wildlife, community benefits, etc.
Tool	Interview questions are provided via GCC app, and interviews are recorded with smartphones, either video or audio depending on upload capabilities
Frequency	Annually for learners, annually for star learner community members (~5 interviews within community per star learner (family, community lead, principle, etc), focus on one-two learners per month), several 'control' community interviews per year as well (community members with no link to the program)
Responsible	GCC facilitators for learner interviews, GCC program manager for community interviews (can help each other)
Reporting	The interviews will be uploaded onto GCC's online platform through the app, and will be analyzed by GCC staff and students
Quality Control	Learners will need their parent/guardian to sign a release form for interviews. GCC app will have this release form available and facilitators should discuss logistics with the principle. Once signed, form should be scanned/photographed and uploaded with the interview recording. Community members must also sign a release form - digital option here through GCC app

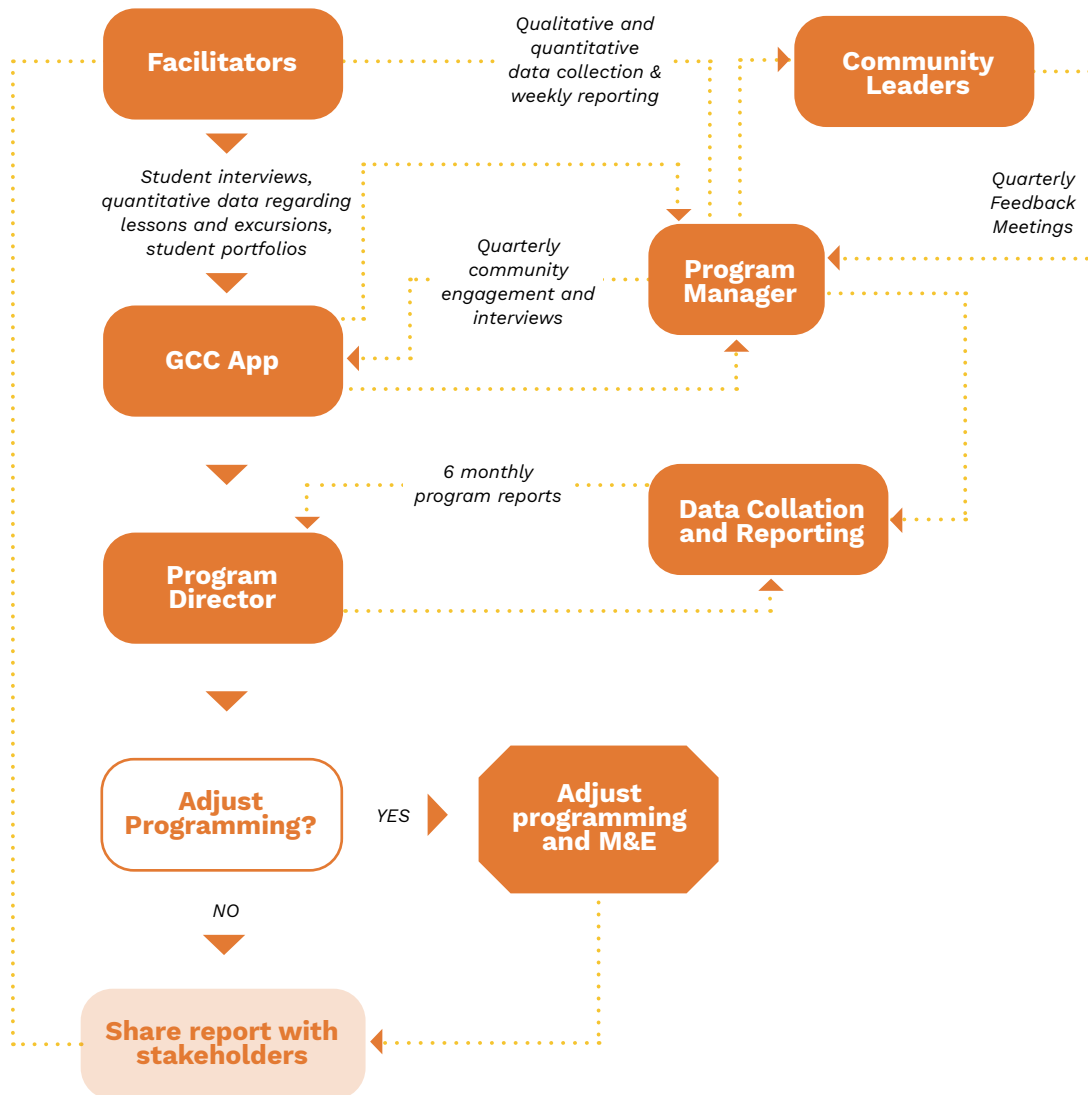
Indicators

Indicator	Portfolio of evidence per graduate and post-graduation career tracking
Definition	Individual learners have documentation via GCC facilitators of exposure to lessons, excursions and conservation careers, skill building, and attitude and behavior changes i.e. a portfolio of evidence at the completion of the program to present to employers and higher education opportunities. GCC has a way to track the learners and their careers post-program
Purpose	To track the learners success and to track program success through formative evaluation, by contributing to a long-term data set of wildlife economy careers obtained with assistance from the program
Baseline	Tracked exposure to lessons and excursions - quantitative data collection per learner
Target	Baseline, plus tracked attitude and behavior change, qualitative data collection per learner, and post program graduation tracking
Data Collection	Collating all data collected on previous indicators within a digital portfolio for each learner and creating a 'check-in' protocol for graduated students and their employers via WhatsApp
Tool	GCC app and WhatsApp
Frequency	Portfolio completion upon graduation, check-in bi-annually with graduates via WhatsApp
Responsible	Program Manager and Facilitator
Reporting	WhatsApp check-ins will be entered through a form into portfolio via online platform
Quality Control	Check ins with graduates - data will be confirmed or denied by employer/supervisor

6 Roles & Responsibilities Pertaining to M&E

ROLE	RESPONSIBILITIES
Facilitators	<ul style="list-style-type: none"> • Quantitative data collection and entering into the app. This includes initial school data, location, school name, student profiles, etc. as well as lesson details • Student interviews for qualitative data collection. Must record interviews and upload recording for analysis • Entering data in a timely manner (ideally directly after each lesson) to generate weekly and monthly activity reports • Enter notes in the app in student profiles about particular students when they are standing out in the program - reference Nat Geo's Learning Framework for guidance
Program Manager	<ul style="list-style-type: none"> • Data checking - ensure all data entered by the facilitators is correct and makes sense, overseeing data collection and assisting where necessary - Ensure all data is being collected • Qualitative data collection, assistance with student interviews, mainly focusing on community member interviews and 'control school' interviews • Report compilation for data results of schools in their region (annual) • Relationship building in study areas
Program Director	<ul style="list-style-type: none"> • Conducting analysis on collected data, both qualitative and quantitative • Adjusting M&E protocol based on formative evaluation • Adjusting program based on formative evaluation • Report compilation and workshop conduction for data collection • Interview design
Academics (outside participants)	<ul style="list-style-type: none"> • Conducting analysis on collected data (both qualitative and quantitative) • Study design and adjustment • Data collection, dependent on the participant

7 Data Flow



Facilitators will be the main data collectors (both qualitative and quantitative) in regards to the students. They will enter data collected into the GCC app on a daily basis with the assistance of the Program Manager. The Program Manager will collect data on community members as well as assisting in student data collection, and facilitating frequent activity reports and meetings. The Program Manager will review and collate data collected into reports, which will be reviewed by the Program Director in regards to formative evaluation. The Program Director will adjust programming as necessary, and share reporting with stakeholders and internal team.

8 Data Management

8.1 Storage

Data from the GCC App (raw data) will be stored in a cloud-based platform, potentially with Amazon or Google, in order to be accessible to international staff and partnering academics. Processed data and reports will be anonymous and openly available to interested parties, partners and stakeholders. Data will be stored indefinitely.

8.2 Analysis

Qualitative data will be analyzed using the software NVivo, and quantitative data will be analyzed using the software SPSS. Data will be visualized with Spotfire.

8.3 Privacy

This program strives to be GDPR compliant. All data collected pertaining to minors will be signed off using a consent form by their parent or guardian as well as an assent form for minors 13 years old and over, and all data collected from adults will also have consent (verbal and recorded, or written). Full disclosure will be given prior to consent in regards to data usage and anonymity. No individual details or names will be shared outside of core GCC staff without that individual's written or verbal (recorded) consent (or parent/guardian consent if under 18 years of age). Any sensitive information collected will be entered and saved anonymously with demographics rather than individual identifiers.

Citations

Amjad, U.Q. et al. (2013). Measuring the Impact of Environmental Education Programs. Vol. 34.

Duckworth, A. and Quinn, P.D. (2009). Development and validation of the Short Grit Scale (Grit- S). Journal of Personality Assessment [Online]:91. Available at: <http://www.sas.upenn.edu/~duckworth/images/DuckworthandQuinn.pdf>

Educate! (2014). Impact Evaluation of End of Program Data from the Educate! Randomised Control Trial.

Hinson, L. et al. (2016). Measuring Positive Youth Development Toolkit: A Practical Guide for Implementers of Youth Programs. Washington DC.

Hübschle, A. and Shearing, C. (2018). ENDING WILDLIFE TRAFFICKING; Local Communities as Change Agents. [Online]. Available at: <https://globalinitiative.net/wp-content/uploads/2018/08/TGIATOC-Wildlife-Trafficking-Report-WEB-4.pdf> [Accessed: 24 July 2019].

Louv, R. (2006). Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder. Chapel Hill, NC: Algonquin Books of Chapel Hill.

Pierre, G. et al. (2014). STEP Skills Measurement Surveys; Innovative Tools for Assessing Skills.

Scott, J.M. (2008). Threats to Biological Diversity: Global, Continental, Local.

Simmons, B. (2019). NAAEE Guidelines for Excellence Series [Online]. Available at: <https://naaee.org/eeopro/publication/guidelines-excellence-series-set>.

Stern, M.J., Powell, R.B. and Hill, D. (2014). Environmental education program evaluation in the new millennium: what do we measure and what have we learned? Environmental Education Research [Online] 20:581–611. Available at: <http://www.tandfonline.com/doi/abs/10.1080/13504622.2013.838749> [Accessed: 17 June 2019].

Youth Explorer (2016). [Online]. Available at: <https://youthexplorer.org.za/profiles/country-ZA-south-africa/>.

Resources referenced in program development:

Educate! And their Randomized Control Trial Process: (Educate! 2014)

Grit scale developed by Angela Duckworth (Duckworth and Quinn 2009)

STEP – Skills Measurement Surveys (Pierre et al. 2014)

USAID Positive Youth Development Toolkit (Hinson et al. 2016)

- <https://www.youthpower.org/>
- USAID's YouthPower Learning generates and disseminates knowledge about the implementation and impact of positive youth development (PYD) and cross-sectoral approaches in international youth development. We are leading research, evaluations, and events designed to build the evidence base and inform the global community about how to successfully transition young people into productive, healthy adults.

Measuring the Impact of Environmental Education Programs (Amjad et al. 2013)

- Basis doc for the development of attitude and behavior assessments and reasoning
- Helped develop program indicators

Environmental education program evaluation in the new millennium: what do we measure and what have we learned?

(Stern, Powell and Hill 2014)

- Helped to develop ideal learning outcomes for the program

(Educate! Model, STEP, USAID PYD)

USAID PYD, Youth employment by area graphic website, LSM resources, wildlife trafficking report (relevant resources include: (The Last Child in the Woods, Richard Louv, Amjad et al. 2013, and NAAEE's Guidelines for Excellence in EE series (<https://naaee.org/eeopro/publication/guidelines-excellence-series-set>))

https://www.researchgate.net/publication/326838787_Ending_wildlife_trafficking_Local_communities_as_change_agents

<https://youthexplorer.org.za/profiles/country-ZA-south-africa/>

Appendices

Semi-Structured Interview guideline

Sample interview questionnaire

Consent Agreement:

This is an invitation for your participation in this project, entitled "Empowering youth to conserve wildlife through education in Southern Africa". This interview is being conducted on behalf of Kate Vinnell, a National Geographic Explorer with Global Conservation Corps. She is interested in understanding perceptions relating to the Future Rangers Program. She will be asking questions in relation to education, wildlife conservation, and how it has affected your community and you personally. The interview should take about 1 hour. To make sure that we have an accurate record of what you say, we would like to take an audio recording of this interview, only for Kate's personal use. If you are not comfortable with being recorded, we can stop the recording and continue without it. **All data collected in this interview is anonymous.** Please feel free to ask any questions during or after. We are just here to learn and there's no judgment so please be honest. Your answers will not affect your relationship with Global Conservation Corps or partners. If you wish to participate, please initial here:

Thank you!!

- Kate Vinnell

Date: _____

Participant Identification Number: _____

Name: _____

Location: _____

Year of birth: _____

Educational background: _____

Sources of income: _____

Role within household: _____

Role within community: _____

Individual Interviews (can be scaled up in small group setting) |

1) Warm up questions:

- How long have you lived here? Do you enjoy it?
- Does your family live here? Do you have kids? Boys/girls - how many?
- How do you feel about the education system in your community?
- Have you been inside the national park?
- Do you have a favorite animal/plant/tree/species?

1) What do you feel is your communities' greatest asset? (What do you like about living in your community?)

2) What do you feel is your greatest asset within your community? (what is the best thing you can contribute?)

3) Do you feel you and your family are supported financially?

4) Have you ever felt unsafe in your community? If yes, describe the situation:

5) What do you feel is the largest threat to your community?

6) Do you ever feel in danger/threatened by wildlife? In what way?

7) What do you feel is the largest threat to wildlife?

Future Rangers Theory Logic Model

Assumptions	Inputs	Activities	Outputs	Outcomes		Impacts
The problem or issue and the reasons for proposing the solution suggested in your program's approach.	Resources and/or barriers, which potentially enable or limit program effectiveness	The processes, techniques, tools, events, technology, and actions of the planned program.	The direct results of program activities	Specific changes in attitudes, behaviors, knowledge, skills, status, or level of functioning expected to result from program activities and which are most often expressed at an individual level.		Organizational, community, and/or system level changes expected to result from program activities
<p>There is a lack of connection with the wildlife and wilderness from a young age with local community members living alongside protected areas</p> <p>Providing young community members with exposure to the wildlife economy through an incentive-based system will increase passion and skills around the wildlife economy</p> <p>Passionate, local young people, given mentorship, training, and employment opportunities, will have a positive effect on poaching levels long term and add value to the wildlife economy</p> <p>Passion encouraged and jobs provided will reduce poverty and therefore poaching, bringing communities closer to their wildlife heritage</p>	<p>Data on school locations around protected areas, poaching risks, existing EE programs</p> <p>Invested school and school principal</p> <p>Local NGO partner for community engagement/presence</p> <p>Staff/Trained facilitators in environmental education</p> <p>Funders, \$500 per month per school</p> <p>Primary school curriculum, secondary school meeting locations and resources for excursions</p> <p>Wildlife economy partners to provide internships, placements, jobs upon graduation</p> <p>Higher education partner to provide additional training and higher education opportunities upon graduation</p> <p>Student tracking system for monitoring</p>	<p>Primary school (Primary school Grade R-7) - awareness building of wildlife conservation, by weekly taught lessons and activities in the classroom by a local facilitator, and occasional excursions and guest speakers</p> <p>Secondary school - Honing a smaller group of passionate students for service learning projects, debates, essay writing, frequent excursions to different sectors of the wildlife economy with guest lectures from various leaders in these sectors. Curriculum includes hard and soft skill development, leadership training and communication strategies, all with wildlife focus.</p> <p>Last two years of secondary school outstanding students are placed in job shadows, internships, learnerships, throughout various sectors, and are assisted with internships, higher ed and job placement upon graduation</p> <p>Inclusive community decision-making and involvement in program implementation and check ins periodically (working with school principals, non-profit partners (Africa Foundation, etc., and community leaders)</p>	<p>Immediate small-scale job provision in communities with hiring of program manager and facilitator staff (4 facilitators, 4 schools, 1 program manager)</p> <p>Direct engagement of community youth with passionate mentors on a weekly basis (1 facilitator reaches ~500 youth per week)</p> <p>Regular youth exposure to wildlife and protected areas that they were previously excluded from (1 trip per quarter to wildlife rehab and/or reserve per FR student)</p> <p>Increased conservation literacy and completion of service-learning projects with FR students (each student must complete an environmental community service project before moving to the next phase)</p>	<p>Short Term (1-3 years)</p> <p>Identification of a group of wildlife-passionate learners in the communities where FR operates</p> <p>General increased knowledge and awareness of conservation issues with FR learners, and some positive behaviour change around land and wildlife stewards</p> <p>Increased knowledge, and awareness of conservation issues within communities adjacent to protected areas through youth ambassadorship</p> <p>Higher levels of leadership, hard and soft skills to increase employability across sectors with FR learners</p>	<p>Long Term (4-6 years)</p> <p>A class of employable 'Future Rangers' who are passionate about wildlife, hardworking, and ready for jobs or higher ed in the wildlife economy</p> <p>Higher overall capacity, education and job placement within protected area adjacent communities, specifically FR graduates</p>	<p>Development of leaders in various sectors who have a connection to the natural world</p> <p>Lower poaching levels in protected areas adjacent to FR communities</p> <p>Higher community-level involvement and inclusion in conservation and stewardship of wildlife and nature through benefits/opportunities provided and passion encouraged and rewarded</p>
Our Beginnings	Our Planned Work		Our Intended Results			



National Geographic Learning Framework





LEARNING FRAMEWORK | SKILLS

GRADE	OBSERVATION	COMMUNICATION	COLLABORATION	PROBLEM SOLVING
	<i>An explorer notices and documents the world around her or him and is able to make sense of those observations.</i>	<i>An explorer is a storyteller, communicating experiences and ideas effectively through language and media. An explorer has literacy skills, interpreting and creating new understanding from spoken language, writing, and a wide variety of visual and audio media.</i>	<i>An explorer works effectively with others to achieve goals.</i>	<i>An explorer is able to generate, evaluate, and implement solutions to problems. An explorer is a capable decisionmaker—able to identify alternatives and weigh trade-offs to make a well-reasoned decision.</i>
PRE-K (3- and 4-year-olds)	<p>Children observe their world, creating the framework for knowing what small means using various scales (e.g., small child, small bug) and experiences with the senses (e.g., sour lemon, soft pillow, hard rain).</p> <p>Children use tools (e.g., rulers, magnifying glasses) to gather data about observed events.</p> <p>Children provide simple answers to questions like "How do you know?"</p>	<p>Children use their growing language skills to talk about their observations and experiences.</p> <p>Children can tell a simple story about an event or experience with prompting.</p> <p>Children begin to initiate conversations but have difficulty waiting their turn to speak.</p> <p>Children become aware of the uses for writing.</p>	<p>Children take turns when playing simple games.</p> <p>Children lead as well as follow in group activities.</p> <p>Children can assign and carry out roles in group activities or games.</p> <p>Children accept compromise when resolving conflicts when the solution is suggested by an adult.</p>	<p>Children solve problems from a single point of view (e.g., how to get a toy that's out of reach).</p> <p>Children begin to identify solutions to problems involving others (e.g., coming up with a way to share a toy or book).</p> <p>Children hypothesize solutions to problems, choose from a short list of solutions, and evaluate a solution based on simple criteria.</p>
K-1 (5- and 6-year-olds)	<p>Children can categorize objects they observe.</p> <p>Children can place themselves in their surroundings, and make observations relative to their own location.</p> <p>Children employ simple equipment and tools to gather data and extend the senses.</p>	<p>Children introduce and maintain conversation about a topic.</p> <p>Children identify common types of texts and media (e.g., storybooks, poems, videos, pictures, music, maps).</p> <p>Children "write" stories that are creative and filled with color and fantasy.</p>	<p>Children participate and cooperate in group activities.</p> <p>Children follow instructions and rules in games and group situations.</p> <p>Children listen to others without interrupting and practice restraint from speaking out of turn.</p>	<p>Children recognize that problems can have more than one solution.</p> <p>Children think through a problem, understanding reasons behind a problem and ways to solve it.</p> <p>Children solve problems with others by negotiating roles in play and taking turns.</p>
2-3 (7- and 8-year-olds)	<p>Children begin to identify maps as one way to record their observations in the real world.</p> <p>Children ask questions and collect and organize information gathered from observation.</p>	<p>Children understand the main idea or message in visual and age-appropriate media.</p> <p>Children understand that media are created for a purpose by an author who may be trying to communicate to inform, persuade, or entertain.</p> <p>Children understand basic mapping elements and that using maps is a way to communicate information, or tell a story.</p>	<p>Children listen at a level where they are able to restate what someone said.</p> <p>Children solve teamwork problems by talking rather than using physical means.</p> <p>Children express a unique personality and viewpoint when relating to others and recognize different perspectives and "otherness."</p>	<p>Children begin to be capable of concrete problem solving.</p> <p>Children understand how systems work.</p> <p>Children make simple decisions and evaluate the consequences.</p>



GRADE	OBSERVATION	COMMUNICATION	COLLABORATION	PROBLEM SOLVING
4-5 (9- and 10-year-olds)	<p>Children experience different ways to make observations and glean information, including the use of spatial graphics.</p> <p>Children start to use knowledge of the physical and human features of historic events to inform current observations.</p>	<p>Children combine information from diverse resources to create a single narrative.</p> <p>Children recognize ethical standards and safe practices in social and personal media communications.</p> <p>Children understand that media are constructed from components—including video, words, photos, and music—that are sometimes mixed and sometimes separate.</p>	<p>Children work in teams to solve problems.</p> <p>Children form and state opinions in group activities.</p> <p>Children respect others' opinions.</p>	<p>Children predict outcomes to problems based on cause and effect.</p> <p>Children work with models and simulations to evaluate problems, pose and test solutions, and determine the best solution(s) to a problem.</p> <p>Children use evidence (e.g., measurements, observations, patterns) to construct or support an explanation or design a solution to a problem.</p>
6-8 (11- to 13-year-olds)	<p>Youth design and conduct investigations that answer questions.</p> <p>Youth apply scientific ideas and evidence to explain real-world phenomena.</p> <p>Youth are skeptical of claims based only on analogy, generalizations, or unclear data or methods.</p>	<p>Youth understand that media technology and production have changed over time and how the medium affects the message.</p> <p>Youth demonstrate media literacy skills of analysis, evaluation, and discernment in decisions about which media to use or reject.</p> <p>Youth select and use appropriate technologies, maps, and other visual media to communicate their message.</p>	<p>Youth take leadership roles at a level that includes mediating group disagreements and assisting groups to work toward a solution.</p> <p>Youth work cooperatively in group activities toward a common goal.</p> <p>Youth gather, evaluate, and synthesize evidence to form opinions, and they exhibit an ability to change their opinion based on others' solid evidence.</p> <p>Youth understand the role of multiple points of view in contemporary geographic policies and issues.</p>	<p>Youth employ principles of formal logic to solve problems.</p> <p>Youth ask questions that can be investigated in the classroom, outdoors, and in museums and other public places.</p> <p>Youth come up with explanations and solutions based on multiple perspectives and evidence from science and math, and they construct explanations using models, theories, and experiments.</p>
9-12 (14- to 17-year-olds)	<p>Youth use geographic tools to observe and analyze relationships between people, places, and Earth systems.</p> <p>Youth develop explanations that are supported by multiple sources of evidence consistent with scientific ideas.</p> <p>Youth notice and criticize claims that people make with limited data, or with no mention of other possibilities.</p>	<p>Youth understand that media are simultaneously a reflection of society and a model for society.</p> <p>Youth analyze complex media to identify the explicit and implicit messages and the strategies used to convey those messages.</p> <p>Youth create and publish content across a diverse range of media, and select the format best suited for project goals.</p>	<p>Youth recognize the subtleties in situations involving the diverse perspectives of others.</p> <p>Youth listen to other group members' ideas or opinions before making decisions, allowing for the possibility of changing one's mind about a position or opinion.</p> <p>Youth participate in collaborative work (e.g., projects, discussions,) with diverse participants on issues or problems outside of the classroom—in the community or in the larger world.</p>	<p>Youth develop an argument based on compelling evidence that considers multiple perspectives and draws defensible conclusions.</p> <p>Youth use models and simulations to formulate and evaluate testable questions and design problems.</p> <p>Youth plan and take action, and they evaluate the results of actions.</p> <p>Youth understand the influence of geographical features on the evolution of significant historic events and movements, and apply this learning to predict, mitigate, and solve current problems.</p>



GRADE	THE HUMAN JOURNEY	OUR CHANGING PLANET	WILDLIFE AND WILD PLACES
	<i>An explorer understands where we came from, how we live today, and where we may find ourselves tomorrow.</i>	<i>An explorer understands the amazing, intricate, and interconnected systems of the changing planet we live on.</i>	<i>An explorer reveals, celebrates, and helps to protect the amazing and diverse creatures we share our world with.</i>
PRE-K (3- and 4-year-olds)	<p>Children are increasingly aware of different stages of the human life cycle.</p> <p>Children display enthusiasm for learning about themselves and others around them.</p>	<p>Children begin building vocabulary for natural features of the environment (e.g., river, mountain).</p> <p>Children begin to develop a framework of information about their world.</p> <p>Children are intuitively drawn to quantities, patterns, shapes, rhythms, symmetry—beginning an understanding of systems.</p>	<p>Children can describe or identify the basic characteristics of plants and animals.</p> <p>Children begin to think about the relationships among living things, their needs, and their surroundings.</p>
K-1 (5- and 6-year-olds)	<p>Children understand how groups of people are alike and different.</p> <p>Children can describe how people in the past lived.</p> <p>Children understand the role that culture plays in their community.</p>	<p>Children recognize that a globe is a representation of the Earth, and can point out the continents and oceans.</p> <p>Children understand what plants and animals (including humans) need to survive.</p> <p>Children understand that plants and animals can change their own environments (e.g., squirrels dig in the ground to hide food, tree roots break through concrete).</p>	<p>Children understand that humans impact the environment, and identify solutions, such as recycling.</p> <p>Children recognize the diversity of animal and plant life on the Earth.</p> <p>Children understand that humans, animals, and plants live in and share the same spaces and can impact each other.</p>
2-3 (7- and 8-year-olds)	<p>Children understand that fossils provide evidence that animals and humans lived long ago.</p> <p>Children understand that people choose to live and work in different places for different reasons.</p> <p>Children can describe how life in the past was similar to and different from life today.</p>	<p>Children can understand and use local and state maps and atlases.</p> <p>Children understand that plants and animals depend on each other to survive in an ecosystem.</p> <p>Children learn about the physical components that shape the Earth's features and patterns.</p>	<p>Children understand the concept of an ecosystem.</p> <p>Children understand that human actions impact animal habitats.</p> <p>Children understand that they can minimize negative effects on animals, plants, and habitats through their own behavior and actions.</p>



GRADE	THE HUMAN JOURNEY	OUR CHANGING PLANET	WILDLIFE AND WILD PLACES
4-5 (9- and 10-year-olds)	<p>Children understand how populations are distributed, and why people move from one place to another.</p> <p>Children explore stories about the past from different perspectives as if they lived at that time.</p> <p>Children know that a region can be defined by cultural elements and that these elements can either contribute to, or pose obstacles to, understanding.</p>	<p>Children analyze and interpret maps to describe patterns of Earth's physical and cultural features.</p> <p>Children identify ways individuals and communities are using science to protect the Earth's resources and environment.</p> <p>Children understand that living things affect the physical landscape of the areas, large and small, they live in.</p>	<p>Children recognize that in a healthy ecosystem, multiple species can coexist and meet their individual needs in a relatively stable web of life.</p> <p>Children understand the ways in which humans affect or change the physical environment and natural resources through activities such as dam construction and draining or rebuilding wetlands.</p>
6-8 (11- to 13-year-olds)	<p>Youth understand the ways in which people and societies are connected globally today and how they were connected in the past.</p> <p>Youth examine how past events impact our current world and future events.</p> <p>Youth focus on the role that cities play in our human story.</p>	<p>Youth understand that human activities impact Earth's living things in a variety of ways.</p> <p>Youth understand major Earth systems, especially the water cycle and the role it plays in shaping the Earth and its weather.</p> <p>Youth understand the global interdependent relationships that exist across Earth's ecosystems.</p>	<p>Youth are able to propose possible solutions to problems related to the protection of critical species.</p> <p>Youth recognize that global ecosystems are susceptible to change, and when they do change, there is a ripple effect in all of the ecosystems' populations.</p> <p>Youth understand that climate change, deforestation, and desertification are modifications to Earth's physical environment that are partly cyclical and partly caused by human activity.</p>
9-12 (14- to 17-year-olds)	<p>Youth understand the role culture plays in the development of individuals, groups, institutions, and societies globally.</p> <p>Youth understand that genetic information provides evidence of evolution.</p> <p>Youth understand that the distribution of natural resources and human populations on Earth determine patterns of global power and influence.</p>	<p>Youth make informed decisions about climate change based on examining evidence and data.</p> <p>Youth take action at individual and community levels to address negative human impacts on Earth's environment.</p> <p>Youth understand that the sustainability of human societies and the biodiversity that supports them requires responsible management of natural resources.</p> <p>Youth understand that cities and towns can create policies, such as those for recycling and waste disposal, that protect the natural environment.</p>	<p>Youth recognize and communicate that local decisions and actions can have far-reaching impacts on the global environment.</p> <p>Youth take action on issues related to the protection of species.</p>

GRADE	CURIOSITY	RESPONSIBILITY	EMPOWERMENT
	<p><i>An explorer remains curious about how the world works throughout his or her life.</i></p> <p><i>An explorer is adventurous, seeking out new and challenging experiences.</i></p>	<p><i>An explorer has concern for the welfare of other people, cultural resources, and the natural world.</i></p> <p><i>An explorer is respectful, considers multiple perspectives, and honors others regardless of differences.</i></p>	<p><i>An explorer acts on curiosity, respect, responsibility, and adventurousness and persists in the face of challenges.</i></p>
PRE-K (3- and 4-year-olds)	<p>Children display enthusiasm for learning about themselves, others around them, and their environment.</p> <p>Children display a willingness to try new things in a supervised setting.</p> <p>Children at this age are naturally curious, which makes this a perfect time for encouraging exploration and creating new experiences.</p>	<p>Children can engage in caring for plants and animals.</p> <p>Children begin to carry out simple daily chores.</p> <p>Children can give simple help to peers who are in need, upset, hurt, or angry.</p>	<p>Children begin to express a sense of individuality and personal preferences.</p> <p>Children show increased levels of physical proficiency and show genuine excitement about physical activity.</p>
K-1 (5- and 6-year-olds)	<p>Children display a willingness to try new things in a supervised setting.</p> <p>Children take in everything around them, creating and building on a framework of information about the world.</p> <p>Children build understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.</p>	<p>Children begin to understand concepts of right and wrong, and they explore ideas of fairness.</p> <p>Children understand they can do things to take care of the Earth.</p> <p>Children recognize and appreciate that people around the world have different languages, customs, appearances, rituals, and accomplishments.</p>	<p>Children understand they are valuable members of their family, class, and group of friends, and that they have something to contribute.</p> <p>Children try out different identities and play-act roles.</p> <p>Children build confidence in language abilities.</p> <p>Children understand it's OK to make mistakes.</p>
2-3 (7- and 8-year-olds)	<p>Children are interested in the natural world, how things are put together, and how things work.</p> <p>Children want to explore society and the world and to think about roles in society.</p> <p>Children are interested in all areas of knowledge and they begin to conduct research and create ways of processing, exploring, and expressing their knowledge.</p>	<p>Children understand the viewpoints of others and they experience empathy for people considerably different from themselves.</p> <p>Children rely on rules that provide structure and security to guide behavior and play.</p> <p>Children identify situations or circumstances that harm the environment.</p>	<p>Children identify personal qualities of self and others and the contributions everyone can make to a group or family.</p> <p>Children participate in simple group problem-solving activities to build skills in stating opinions and listening to others' opinions.</p>

GRADE	CURIOSITY	RESPONSIBILITY	EMPOWERMENT
4-5 (9- and 10-year-olds)	<p>Children use reasoning to consider how others think and why they think that way.</p> <p>Children display a strong sense of curiosity about other cultures.</p> <p>Children work within small groups to try new things. They also begin to design and take on new adventures individually.</p>	<p>Children make suggestions for how to counteract harm to the environment and work productively to promote environmentally safe activities.</p> <p>Children recognize differences in opinion as the result of differences in perspective.</p> <p>Children are governed by moral reciprocity—following rules if there is a known benefit to them and meting out justice according to golden rule logic and based on concern for fairness.</p>	<p>Children identify people who model or embody qualities and characteristics of empowerment.</p> <p>Children have experiences in leading and following in group activities.</p> <p>Children listen to others without judgment or interruption and understand what it means to be “heard.”</p>
6-8 (11- to 13-year-olds)	<p>Youth initiate and participate in adventures with little supervision or structure.</p> <p>Youth experience a re-emergence in learning through doing at this age, with curiosity about how to do things.</p> <p>Youth are curious about philosophical ideas about the natural and cultural world and, specifically, about what they and others can do to make a difference.</p>	<p>Youth are able to take increasingly mature actions based on empathy and respect for others.</p> <p>Youth are developing complex ways of thinking that allow them to understand and analyze the broader scope of human wants and needs—beyond their immediate surroundings to the broader world.</p> <p>Youth identify injustices in the world and problem-solve social and environmental problems.</p>	<p>Youth understand that success and failure are both parts of life for everyone, and that failure can be a positive.</p> <p>Youth recognize their own skills and abilities and the importance of those skills and abilities to their lives and to others.</p> <p>Youth make decisions about daily goals and ways to reach those goals.</p>
9-12 (14- to 17-year-olds)	<p>Youth deepen their awareness of the world and other people and see issues, problems, and solutions on a global scale.</p> <p>Youth seek to learn more about themselves, others around them, their environment, and the world beyond their experiences.</p> <p>Youth actively, and with self-direction, research and seek multiple perspectives to gain deeper understanding.</p>	<p>Youth participate in cross-cultural or international activities designed to increase understanding and empathy across differences in perspective.</p> <p>Youth respond to actions they perceive as being disrespectful to groups in their community or their society.</p> <p>Youth assume responsibility for personal and collective contributions to the reduction of and solution to current problems in the environment.</p>	<p>Youth take positive action in designing plans for addressing issues of interest on a local or global level.</p> <p>Youth openly share their opinions with peers and adults, and they listen to and celebrate others' opinions.</p> <p>Youth serve as positive, active role models for younger children.</p>

GCC Data Collection





































App Map
App On-Boarding

Social Science

Training Tools
GCC Social Science Training Presentation

**Test for baseline
conservation
knowledge**

Primary School (sample)

	How I feel:	What is it?	Have I seen this before in real life? Yes No
	  	_____	Yes No
	  	_____	Yes No
	  	_____	Yes No
	  	_____	Yes No
	  	_____	Yes No
	  	_____	Yes No
	  	_____	Yes No
	  	_____	Yes No
	  	_____	Yes No

Secondary School (sample)

Name:
School and grade:
Date:

Grade 7

These questions are for GCC Future Rangers Program to understand progress and improve our programs. Your answers will have no affect on you at all, and your answers will remain anonymous outside of GCC. Sign here to participate: _____

Name: _____
Age: _____
Gender: _____
School: _____
How many brothers and sisters do you have?: _____
Which community do you live in?: _____
What type of career/job do you want?: _____
What do you parents do for work?: _____
What is your passion?: _____
List ALL the wild animals you have seen in your life, and where you saw them:

Please answer the following questions honestly. There are no right or wrong answers. If you have any questions, please ask your facilitator.

1) How would you rank your knowledge of wildlife?

1 2 3 4 5
No knowledge Somewhat knowledgeable Extremely knowledgeable

2) How would you rank your knowledge of conservation?

1 2 3 4 5
No knowledge Somewhat knowledgeable Extremely knowledgeable

Name:
School and grade:
Date:

7) There are 5 types of environmental actions you can take:

Type of Action:	Have you ever participated in any of these? Which ones? Write YES or NO	Would you be interested in participating in any of these? Write YES, NO, or MAYBE
Persuasion: educating or lobbying other members of the public.		
Consumerism: either changing one's own consumer habits or encouraging others to do so.		
Political Action: action that is aimed at influencing a decision-maker.		
Ecomangement: action to restore, remediate, or improve a natural area.		
Legal Action: action taken through legal avenues.		

8) Do you feel like you could get a job working in wildlife conservation after graduation?

1 2 3 4 5
No chance Maybe, if I work really hard It would be easy

9) Do you feel your community (family, friends, teachers, etc.) supports your goals?

1 2 3 4 5
Not at all A little bit They are very supportive



Future Rangers Program | Process and Resources

JUNE 2020