



The Journal of Population and Sustainability

ISSN 2398-5496

Article title: Endangered species condoms: a social marketing tool for starting conversations about population

Author(s): Sarah Baillie, Kelley Dennings and Stephanie Feldstein

Vol. 4, No. 2, 2020, pp.31-44

doi: 10.3197/jps.2020.4.2.31

Open Access – CC BY 4.0

PRAXIS

Endangered species condoms: a social marketing tool for starting conversations about population

Sarah Baillie¹, Kelley Dennings and Stephanie Feldstein

Center for Biological Diversity, Tucson, Arizona, USA

Abstract

The Endangered Species Condoms project was launched 10 years ago to bring the discussion of human population growth back into the environmental movement with a focus on human rights and reproductive justice. In that time, more than 1 million condoms have been distributed by thousands of volunteers. The principles of social marketing are used through the Endangered Species Condoms project to create a national discourse around the population issue. They are introduced in both formal teaching settings like high school and university classrooms as well as informal settings like community events and after-hours programing at zoos and museums to reach a broad, diverse audience.

Keywords: endangered species; outreach; overconsumption; social marketing

Introduction

Human population growth is at the root of our most pressing environmental issues. The number of people on the planet drives up the demand for resources which in turn propels climate change, fossil fuel use, habitat destruction, and biodiversity loss.

1 Corresponding author: sbaillie@biologicaldiversity.org

However, this topic is rarely discussed within the environmental movement. The Center for Biological Diversity, a national environmental non-profit based in the USA, recognizes that it is crucial to have conversations around the effects of population growth on the environment and wildlife in order to address the problem. The Center only supports ethical, non-coercive solutions to combat unchecked human population growth, including comprehensive sex education and universal access to contraceptive resources and reproductive health care. Using creative social marketing techniques has helped break down barriers to bring this important topic back into the environmental discourse.

Social marketing is used to address “wicked problems” – those that are complex with no easy solution – and unplanned pregnancies are just that. Decreasing unplanned pregnancies involves improving contraception and sexual education through policy and infrastructure, along with changing cultural norms around family size and talking about reproductive health. The social marketing framework facilitates choosing a behavioral objective along with a priority audience and then campaigns are designed around this. The objective could be upstream to change policy with elected officials as the audience or downstream where the objective is to use contraception and the audience is individuals of reproductive age.

This paper will discuss the importance of talking about population within the environmental movement, why the Center focuses on domestic reproductive rights and choices, and how we use a social marketing framework in our creative outreach to effect change. The Endangered Species Condoms are a unique tool to start a conversation about the negative impacts of unchecked population growth. They provide people with a literal tool to prevent unintended pregnancies and additional information about the ethical solutions we advocate for. We have developed and grown this program over the past ten years to expand our reach to new audiences.

Resistance to discussing population as an environmental issue

We are currently in the sixth mass extinction and losing species at an unprecedented rate, an estimated 1 million species are at risk of extinction (UNSDG, 2019). There is a very clear correlation between the growth of the human population and the extinction rate of species (Scott, 2008; McKinney, 2001; McKee, Chambers and Guseman, 2013). North America has lost 29 percent of its total bird population

in the past 48 years (Rosenberg, et al., 2019). Large apex predators adjust their hunting patterns based on the presence of humans (Suraci *et al.*, 2019), as do mesocarnivores (Clinchy, et al., 2016). As our population grows, every new individual needs resources such as food, water, shelter, energy and land, and as demand on natural resources grows we are negatively impacting wildlife through destruction of habitats and other changes to the ecosystem.

Despite population being intrinsically connected to the most urgent environmental crises of our time, it is rarely directly addressed by the environmental community. Some organizations and individuals may have different strategic or philosophical reasons for ignoring the topic. For example, some groups have chosen to focus on industrial practices and polluting infrastructures rather than individual behavior. These groups may view the solutions to population such as reproductive rights and education as outside of their missions or expertise. But we have also found that many people distance themselves from population discussions because of cultural taboos around sex or stigma from past transgressions where proposed solutions for population growth have targeted vulnerable, marginalized communities. In some cases, groups may support equality, education and healthcare with an emphasis on other co-benefits like resilience, while excluding language around population growth to avoid potential negative associations.

In 2009 the Center for Biological Diversity recognized that all our other work to save species would ultimately be undermined if human population growth was not addressed. Since it can be a challenging topic for many people to talk about, we knew we had to be creative if we were going to bring population back into the environmental movement in a positive, productive way. The award-winning Endangered Species Condoms project was created to use humor and art to make the topic of population and family planning easier to approach.

The colorful condom packages include original artwork featuring North American species threatened by population growth and slogans like “Before it gets any hotter, think of the sea otter.” Inside the package is more information about the featured species, how population pressure negatively effects wildlife, recommended human-rights solutions, and two condoms.

In addition to learning about population and proposed solutions, recipients literally receive a tool enabling them to have safe sex and help prevent unplanned

pregnancies. The condoms included in the packages are fair-trade, vegan, nitrosamine-free and sourced from sustainable rubber plantations.

The Endangered Species Condoms help people make a direct link between population growth and imperiled wildlife that they care about. Each species featured on the condom packages was chosen because of its connection to the threats from our growing human population. For example, monarch butterflies are disappearing due to corn and soybean crops replacing the native plants they need to survive. There is also the additional threat of the pesticides used on those crops, most of which are grown to feed to livestock. Hellbender salamanders are declining because of increased water pollution from runoff coming from cities and agriculture. Polar bears have become powerful symbols of climate change and the effects of greenhouse gas emissions from our ever-growing population. By starting the conversation with the featured animal, people are reminded of what they want to save before broaching a potentially uncomfortable topic. As discussed in more detail below, the Center has successfully used this approach to start more than a million conversations about the impact of population growth on wildlife and the environment.

Focusing on population pressure in the U.S.

Since the United States has one of the largest carbon footprints per individual, Americans have a disproportionate impact per person compared to other countries. Americans are also responsible for a disproportionate amount of habitat loss, pollution and waste. The Endangered Species Condoms – and the Center's Population and Sustainability program as a whole – work to provide a local context for how wildlife are affected by the twin threats of population growth and overconsumption. By focusing on these issues side-by-side, we've been able to demonstrate how they're intertwined and overcome the false dichotomy that only one or the other is to blame for global pressure on the planet. Although many population groups focus their work in higher-fertility countries, the Center chooses to focus our efforts domestically to increase awareness among high-consuming populations and advance positive solutions to address this global issue.

We acknowledge that U.S. population is growing more from immigration than it is from the birth rate (Adamy and Overburg, 2019), but we believe that national immigration policy is not an appropriate or effective solution to address a global

problem. Furthermore, immigration policy has often been used in the United States to violate human rights and worsen environmental damage (CBD, n.d.).

Where we do see opportunities for solutions is in addressing reproductive rights. While the United States is below replacement rate fertility, about 45 percent of all pregnancies in the country are unintended (Finer and Zolna, 2016). This is high for a developed country, but it becomes less surprising after learning only 39 states mandate sex education. Of those, only 17 mandate that it be medically accurate (Guttmacher Institute, 2019). Thirty nine states stress abstinence, and only 20 states include information about condoms and contraception (Guttmacher Institute, 2019). In addition, recent federal policies restricting the Affordable Care Act and Title X clinics are decreasing access to contraception and health services. Improving access to family planning and education is crucial to slowing population growth to more sustainable rates.

How social marketing can help change the population narrative

In a previous article published in this journal, William Ryerson (2018) wrote about entertainment education. He discussed how, when the framework is rooted in social and behavior-change communications theory, results can be substantial and cost-effective. Social marketing used by the Center for Biological Diversity is another successful social and behavior-change framework. The social marketing process applies marketing principles and techniques to create, communicate, and deliver value in order to influence behaviors that benefit society as well as the priority audience (Lee and Kotler, 2011).

The concept emerged in the 1950s when sociologist G.D. Wiebe (1951), in an article in *Public Opinion Quarterly*, asked “Why can’t we sell brotherhood like we sell soap?” and explored the challenges of selling a social good as if it were a commodity. However, it was not until 1971 that Kotler and Zaltman (1971) coined the term “social marketing” and developed a framework from which to work. One of the first social issues tackled by social marketing was that of attempting to increase contraceptive use in India in the 1960s. The effort involved selling subsidized Nirodh condoms with the assistance of major private sector marketers like Unilever and Brooke Bond Tea, which helped support distribution of the product (Harvey, 1999). This trend continued into the 1980s when condoms emerged as an effective tool to combat the spread of HIV/AIDS (Manoff, 1985).

Like entertainment education, social marketing is rooted in theories of behavior change including the Social Ecological Model, Stages of Change or Transtheoretical Model, Theory of Planned Behavior, Social Cognitive Theory, and Diffusion of Innovation Theory. These theoretical approaches are used to help outline research, create a campaign strategy and/or track evaluation metrics. Social marketing is frequently used in the health sector and is commonly applied to some environmental issues, such as energy efficiency. It can be used with any social issue where there's a beneficial behavior-change component, such as family planning.

Social marketing is a targeted, step-by-step and data-driven process with the objective of removing the barriers an audience may have to a desired action and enhance the benefits and motivations to engage in the behavior. There is a focus on outcomes and impact, and monitoring and evaluation are important components to track results.

The number and type of social marketing steps can vary, but the following seven steps show how the Center for Biological Diversity uses the framework for the Endangered Species Condoms Project (Dennings, 2018):

1. **Outcome** – Campaign outcomes might be dictated by management, costs, local government, etc. and should include goals for short and long-term success. Our long-term outcome is to decrease population pressure on wildlife and associated habitat by increasing access to family planning and contraceptive resources. The Endangered Species Condoms serve the short-term outcome of increasing visibility and engagement for these issues in support of long-term behavior and policy change.
2. **Action or Behavior** – The desired behavior identified for a campaign's priority audience should be helpful and have a high likelihood of the audience engaging in the action. Some behaviors are made up of sub-actions which may require creating a behavioral map prior to choosing the behavior the campaign will promote. While the Endangered Species Condoms facilitate safe sex, the primary purpose of the colorful, fun packages is as a conversation tool. The desired action is to spur conversations about population that

will inspire people to choose whichever birth control method is right for them and get engaged in supporting access to all forms of contraception, comprehensive sex education and reproductive healthcare equality.

3. **Segment** – Although many social issues would benefit from “everyone” changing their behavior, segmenting people by factors such as perceived barriers, difficulty of the action, demographics and receptiveness to different messaging can be used to create more effective, tailored campaigns. (Lee and Kotler, 2011). While anyone inspired by the Endangered Species Condoms’ message can help influence society and the political system, the project’s target audience is people of child-bearing age. Particularly those who have not yet made family planning decisions or who are environmentally-minded but may be unaware of the intersection between the increase in population and environmental degradation.
4. **Barriers** – The reasons why people are not already engaging in the desired behavior – including internal barriers like motivation, knowledge, attitudes, beliefs and abilities as well as external barriers like infrastructure, economics, access, convenience and social situations – needs to be researched for each audience and incorporated into campaign strategies (McKenzie-Mohr, 2011). The humor, artwork and informational packaging of the Endangered Species Condoms helps overcome taboos and stigma by providing an approachable way to frame an often-challenging conversation and clear information on the problem and positive rights-based solutions.
4. **Strategy** – Many behavior-change strategies are informed by social science such as the use of prompts, norms, defaults, commitment, diffusion, feedback, framing, heuristics, incentives, etc. (Michie, Atkins and West, 2014). Using some of these social science strategies, the Endangered Species Condoms are an effective way to prompt a conversation about population and its impact on wildlife. By talking openly about family planning as a climate change solution we help normalize the conversation.

5. **Implement** – After planning and testing a strategy, it is then implemented and the results monitored. The Endangered Species Condoms are distributed through a large volunteer network, with a focus on particular holidays and events discussed in more detail below.

6. **Evaluate** – The campaign should be assessed on a regular basis and adjusted as needed as this is an iterative process. A logic model can be a useful tool to help think about outputs, outcomes and impact. The Center evaluates each major condom distribution in addition to an annual review of the project as a whole.

Another way to build a campaign strategy is with marketing's four Ps: Product, Price, Place and Promotion (Lee and Kotler, 2011). The Endangered Species Condoms project provides an attention-grabbing product that's related to the message and given away for free. Place is determined by the focus of each distribution – for example, some distributions focus on specific geographic locations tied to holidays or species, while the Pillow Talk program targets institutions such as zoos, museums and science centers. Finally, the condom package itself and the use of prompts, norms and framing all contribute to the promotion, which is enhanced by traditional and social media outreach and, occasionally, advertising such as posters or billboards.

How the Endangered Species Condoms project works

The Endangered Species Condoms are distributed by hundreds of volunteers nationwide every year. Around 100,000 condoms are disseminated annually, and in July 2019 we celebrated giving out our millionth condom. The condoms are shared three key ways:

- 1) People submit their ideas year-round for how they want to give out the condoms, and we send the condoms free of charge to where we think there are good opportunities for volunteers to have conversations about population. Volunteers hand out the condoms in a variety of settings, such as classrooms, health clinics, churches, community events and college campuses. While we may offer support and tips for individual distributions, this peer-to-peer strategy is focused on volunteers choosing where they would like

to hand out the condoms, allowing us to reach different audiences in a wide range of communities that we might not otherwise have access to.

- 2) The Center organizes several coordinated distributions each year where thousands of condoms are sent out to be given away within a particular timeframe or following a theme. Volunteers are recruited around holidays that are particularly relevant, like Valentine's Day and Earth Day. We have also recognized World Population Day, Earth Overshoot Day and World Contraception Day. Additionally, we send condoms to strategic decision-makers. For example, in 2017 we sent the Endangered Species Condoms to all 100 U.S. Senators for World Population Day connected to a vote on the Affordable Care Act. We also sent them to President Trump's appointees to Health and Human Services.

By using both traditional and social media to promote these distributions, we're able to extend the reach of the condoms. This is done by placing op-eds, blog posts, and targeted local outreach. These allow the conversations to go beyond just those people who are receiving the Endangered Species Condoms. For example, a tweet one senator posted with a picture of the condoms received more than 4,700 likes, 1,600 retweets, and 170 comments as well as attracting attention from online alternative news outlets.

- 3) The interactive Pillow Talk program gives away condoms at special events held at zoos, museums, science centers and other science center locations (described in more detail below).

Over the ten years the Endangered Species Condoms project has been active, there have been three iterations of six condom package designs highlighting different species. The artwork has been updated to keep the designs contemporary and different species have been included to represent a broad range of wildlife affected by human population growth. Some species, like the polar bear and hellbender, have been present in multiple sets. We also incorporated four Spanish-language designs in 2017, translating the polar bear and monarch

butterfly packages and adding the vaquita porpoise and Mexican gray wolf. The intention was to expand our reach by being more inclusive with our messaging.

The Endangered Species Condoms project also expanded in 2017 to include an environmental education and outreach program called Pillow Talk. This program uses engaging activities to discuss the relationship between population and patterns of consumption, and how Americans' disproportionate impact per individual is an important component of our unsustainable population growth.

This program started with zoo, museum, and science center adult-only event audiences but can be adapted for other settings. We started with these particular audiences because studies show that people who visit these institutions are more interested than the average person in ways they can reduce their individual impact (Falk, 2014)(Falk *et al.*, 2007). Often, they are unaware of the greenhouse gas emissions impact that having a child has and now can add family planning to their emissions reduction toolkit (Wynes and Nicholas, 2017)which records the aggregation of billions of individual decisions. Here we consider a broad range of individual lifestyle choices and calculate their potential to reduce greenhouse gas emissions in developed countries, based on 148 scenarios from 39 sources. We recommend four widely applicable high-impact (i.e. low emissions).

In the past two years, the Center has worked with 53 different institutions and participated in 100 events around the country. We estimate that we've reached tens of thousands of individuals through these events that host anywhere from 100 to 3,000 visitors. Volunteers represent the Center at these events to help explain the message behind the Endangered Species Condoms, answer questions and facilitate environmental education activities.

The activities provided for Pillow Talk events are designed to also address the consumption side of the population equation. A game called Carbon Budget Monopoly helps participants gain a better understanding of the components of their carbon footprint. Players start with an amount of money to represent the amount of carbon dioxide that the average American is responsible for annually. They are then asked a series of questions about their daily life related to diet, transportation, energy use and having children. Potential answers are broken down into categories to simplify the responses and calculations. The higher

the environmental impact of an answer, the more money is owed. For example, someone who eats meat every day would pay more than a vegetarian or vegan. The amount of money left over at the end of the game gives the player an idea of how they compare to the average American and understanding of what actions make up the biggest parts of their carbon footprint.

Evaluating success

There are challenges in assessing the behavior change of a large national audience, particularly around long-term issues such as having children or contraceptive use. Since the condoms are given away at a variety of events by volunteers, we aren't able to follow up with the recipients to learn if the condoms changed their perceptions, influenced their family planning decisions or prompted them to have additional conversations. As a result our evaluation focuses on measuring the number of conversations between volunteers and condom recipients, the quality of conversations, social media and earned media.

High-quality conversations are those where we're reaching the intended audience and the message of the condoms is discussed beyond just the novelty of the packaging. This is built into the model for Pillow Talk events. For individual distributors, we are selective in opportunities when screening the requests for the Endangered Species Condoms. Distributors with a specific plan and audience are preferred. For example, an environmental science professor at Bellevue College uses the condoms in her lesson plan. She talks about the connection between population and species decline and then gives the condoms to her students with an assignment to share the condoms with someone else and tell them about the connection. The students then write a paper about how the conversation went.

Though we aren't able to track how every volunteer conversation goes, we do receive feedback from volunteers and event coordinators from Pillow Talk events, which helps us evaluate the events and refine our training materials as needed. A volunteer from an event in Florida describes visitors' reactions to the condoms:

"As a volunteer, I immediately saw positive changes in people's expressions and increases in enthusiasm for listening to our message when I mentioned the condoms. People seemed much more engaged by the unusual topic and were genuinely excited about getting to take the packages home to show people."

An event coordinator in Texas emphasizes the importance of drawing these connections for visitors:

“The Endangered Species Condoms proved a strong attraction for our guests and a wonderfully playful gateway into connecting the dots between human behavior and its larger consequences on the environment. The mission of increasing awareness of our impact on the globe – from climate change to infringing on natural habitats – can and should be a part of our daily consciousness.”

We continue to solicit feedback from individual volunteers, event volunteers, and event coordinators so that we can continually better understand how our message is received.

Conclusion

Endangered Species Condoms present a unique way to discuss human population growth and its impacts on our environment. They function as both a messenger and tool for our recommended solutions. Based on the principles of social marketing, the condoms serve as an eye-catching form of advocacy, helping people make the connection between wildlife and family planning and, by extension, between conservation and reproductive rights. This project makes these issues more approachable, which we hope continues to inspire both individuals and other environmental groups to recognize the importance of tackling population as the urgent issue it is.

References

Adamy, J. and Overburg, P., 2019. Immigrants propel population growth in 10% of U.S. counties. *Wall Street Journal*. [online] Available at: <<https://www.wsj.com/articles/immigrants-propel-population-growth-in-10-of-u-s-counties-11555560061>> [Accessed: 23 October 2019].

CBD, n.d.. *Statement on Immigration and Population*. [online] Available at: <https://www.biologicaldiversity.org/programs/population_and_sustainability/immigration_statement.html> [Accessed: 29 October 2019].

Clinchy, M. et al., 2016. Fear of the human “super predator” far exceeds the fear of large carnivores in a model mesocarnivore. *Behavioral Ecology*. 27 (6), pp. 1826-1832. doi: 10.1093/beheco/arw117.

Dennings, K., 2018. Changing behaviors. In: Social Marketing Association of North America. *Missouri Recycling Association 2018 annual conference: creating connections*. Kansas City, MO. 11-13 September 2018.

Falk, J. H. et al., 2007. *Why zoos & aquariums matter: assessing the impact of a visit to a zoo or aquarium*. [online] Association of Zoos and Aquariums. Available at: <www.aza.org> [Accessed: 16 October 2019].

Falk, J. H., 2014. Evidence for the educational value of zoos and aquariums. [online] *World Association of Zoos and Aquariums Magazine*, 15. Available at: <www.waza.org> [Accessed: 16 October 2019].

Feldstein, S., 2015. A long-overdue burial for the population vs. consumption question. [online] *Enzia*. Available at: <<https://ensia.com/voices/a-long-overdue-burial-for-the-population-vs-consumption-question/>> [Accessed: 29 October 2019].

Finer, L. B. and Zolna, M. R., 2016. Declines in unintended pregnancy in the United States, 2008-2011. *New England Journal of Medicine*, 374 (9), pp. 843–852. doi: 10.1056/NEJMsa1506575.

Guttmacher Institute, 2019. *Sex and HIV education*. [online] Guttmacher Institute. Available at: <<https://www.guttmacher.org/state-policy/explore/sex-and-hiv-education>> [Accessed: 22 October 2019].

Harvey, P. D., 1999. *Let every child be wanted: how social marketing is revolutionizing contraceptive use around the world*. Westport, CT: Auburn House.

Kotler, P. and Zaltman, G., 1971. Social marketing: an approach to planned social change. *Journal of Marketing*, 35(3), p. 3. doi: 10.2307/1249783.

Lee, N. and Kotler, P., 2011. *Social marketing: influencing behaviors for good*. 4th edition. London: SAGE Publications.

Manoff, R. K., 1985. *Social marketing: new imperative for public health*. Westport: Praeger Publishers.

McKee, J., Chambers, E. and Guseman, J., 2013. Human population density and growth validated as extinction threats to mammal and bird species. *Human Ecology*, 41 (5), pp.773–778. doi: 10.1007/s10745-013-9586-8.

McKenzie-Mohr, D., 2011. *Fostering sustainable behavior: an introduction to community-based social marketing*. Gabriola Island, BC: New Society Publishers.

McKinney, M. L., 2001. Role of human population size in raising bird and mammal threat among nations. *Animal Conservation*, 4 (1), pp. 45–57. doi: 10.1017/S1367943001001056.

Michie, S., Atkins, L. and West, R., 2014. *The behaviour change wheel: a guide to designing interventions*. London: Silverback Publishing.

Nations, U., 2019. *Growing at a slower pace, world population is expected to reach 9.7 billion in 2050 and could peak at nearly 11 billion around 2100* [online] UN DESA United Nations Department of Economic and Social Affairs. Available at: <<https://www.un.org/development/desa/en/news/population/world-population-prospects-2019.html>> [Accessed: 22 October 2019].

Rosenberg, K. V. et al., 2019. Decline of the North American avifauna. *Science*, p. eaaw1313. doi: 10.1126/science.aaw1313.

Ryerson, W. N., 2018. The hidden gem of the Cairo consensus: helping to end population growth with entertainment media. *The Journal of Population and Sustainability*. 2 (2), pp. 51–61.

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.

Suraci, J. P. et al., 2019. Fear of humans as apex predators has landscape scale impacts from mountain lions to mice. *Ecology Letters*. 22 (10). pp. 1578–1586.

UNSDG, 2019. *UN report: nature's dangerous decline 'unprecedented'; species extinction rates 'accelerating'*. [online] Sustainable Development Goals. Available at: <<https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/>> [Accessed: 2 October 2019].

UNESCO, 2010. *Population continues to grow*. [online] Available at: <http://www.unesco.org/education/tlsf/mods/theme_c/popups/mod13t01s001.html> [Accessed: 22 October 2019].

Wiebe, G. D., 1951. Merchandising commodities and citizenship on television. *Public Opinion Quarterly*, 15 (4), p.679. doi: 10.1086/266353.

Wynes, S. and Nicholas, K. A., 2017. The climate mitigation gap: education and government recommendations miss the most effective individual actions. *Environ. Res. Lett*, 12 (7), p. 74024. doi: 10.1088/1748-9326/aa7541.