Backyard Birding Survey - Sonja H. Kolstoe and Trudy Ann Cameron (2020). This variant was used in an online survey distributed to a representative sample of Qualtrics panelists in these four states plus Washington DC, although the survey infrastructure is designed to be adapted to any part of the continental United States.

This study requires a sample of people who represent the population in a particular region. Where do you live?

Delaware

Maryland

Pennsylvania

Virginia

Washington, DC

Somewhere else

→

What is your gender?

Male

Female

Non-binary

Prefer not to say

←

→

What is your age bracket?

Under 18 years

18 to 24 years

25 to 34 years

35 to 44 years

45 to 54 years

55 to 64 years

65 to 74 years

75 years and older

Prefer not to say

←

→

What is your race? [Categories to match the U.S. Census Bureau]

White

Black or African-American

American Indian or Alaskan Native

Asian

Native Hawaiian or other Pacific Islander

From multiple races

Prefer not to say

←

→

Prior to the start of the current pandemic, about what was the total annual income of the HOUSEHOLD in which you live? [Brackets to match the U.S. Census Bureau]

Less than $20,000

$20,000 to $24,999

$25,000 to $29,999

$30,000 to $49,999

$50,000 to $74,999

$75,000 to $99,999

$100,000 to $124,999

$125,000 to $149,999

$150,000 to 174,999

$175,000 to $199,999

$200,000 or more

What is the 5-digit ZIP code where you live? This information helps us make sure that all regions of your state are represented in our study.

_____

←					→

Excellent. This study still needs more people like you. Now, we will tell you a bit about the study and get your formal consent to take part.

Study Procedures: This study will provide policy-makers in the Chesapeake Bay region with needed information about people's preferences for conservation policies to protect wild birds. If you decide to participate, you will be asked to complete a roughly 25-minute survey.

To make your survey specific to your area, you will be asked for your ZIP code. You will be given some background information about conservation measures for wild birds. Next, we will ask you consider, one at a time, five specific policy options for your area. For each one, we will ask whether you would vote in favor of that policy if it were the only option being considered. Last, you will be asked for a little information about yourself and your household, so we may group your answers with those of others who are like you. We will also ask for your attitudes and opinions about wild birds.

Confidentiality of Records: There is minimal risk to confidentiality from participation in this study. Only *statistical summaries* of the data collected by this survey will be published. No individually identifiable information will be retained or released publicly during the course of this study.

Questions About this Survey? If you have questions or concerns about this survey, or about the study that will use the data it collects, please contact Dr. Trudy Ann Cameron, Mikesell Professor of Environmental and Resource Economics, Department of Economics, University of Oregon, Eugene, OR, 97403-1245 (cameron@uoregon.edu), or Dr. Sonja Kolstoe, Assistant Professor of Economics, Department of Economics and Finance, Salisbury University, Salisbury, MD 21801 (shkolstoe@salisbury.edu).

Questions About the Protection of Research Subjects? The University of Oregon's Research Compliance Services can be reached at researchcompliance@uoregon.edu, or at 541-346-2510. Salisbury University's Institutional Review Board (IRB) can be reached through the Office of Graduate Studies and Research at Salisbury University at 410-548-3549 or toll free 1-888-543-0148

Participation in this Study is Voluntary. You may discontinue participation at any time.

Are you eligible and willing to be a participant in this study? By clicking Yes, you certify that:

1. You are at least 18 years or older
2. You *currently* live in the Chesapeake region of the United States, in either Delaware, the District of Columbia, Maryland, Pennsylvania, or Virginia
3. You consent to have the information you provide used in this study

Yes

No

←

→

This study is intended to help policy-makers make decisions, so the quality of the data is important.

Do you commit **to thoughtfully provide your best answers** to each question in this survey?

I will provide thoughtful and honest answers

I will not provide thoughtful and honest answers

I can't promise either way

← →

This survey is about policies to help "backyard" birds. The policies we describe will be **tailored to your particular Bird Conservation Region (BCR)** because each region has different types of backyard birds.

We will **match you automatically** to your BCR, according to your county of residence.

The map below shows all the BCRs in North America, because you may be interested to see which other areas have the same types of wild birds as your area.
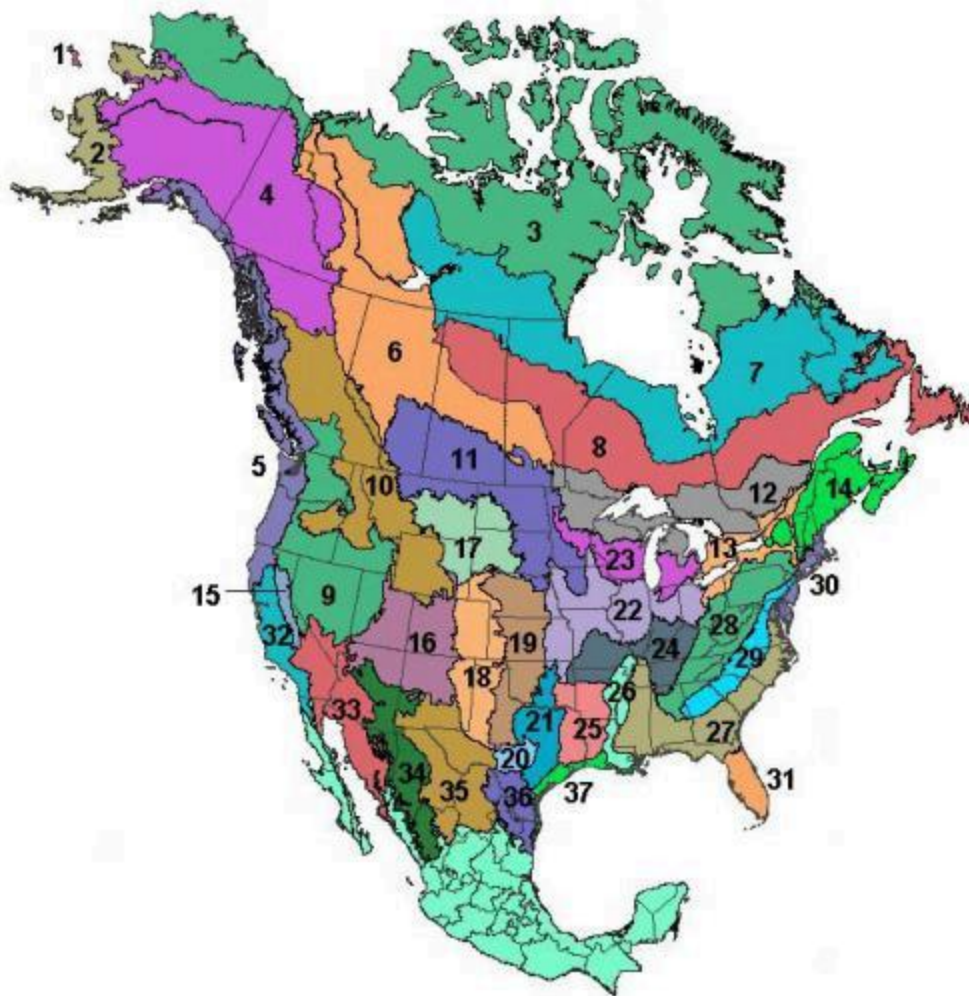
You indicated that you currently live in **Virginia**. Please confirm the **county or independent city** in which you live by choosing from the list below.

Your county (or independent city) determines your "Bird Conservation Region" (BCR). This region defines the set of "backyard birds" that will be featured in your personalized version of this survey.

▼

← →

You have selected state:

Virginia

and county/BCR:

Fairfax ....[BCR 29]

Your upcoming policy choice scenarios will use the most common species of birds in your county's BCR, so if this county (or city) information is incorrect, please go back and make a change.

←

→

Confirmation: We have your **current** 5-digit home ZIP code in Virginia recorded as **22003**

Have you lived in your current ZIP code since January 1, 2017?

Yes

No

←   →

Which of the following best describes **the outdoor space** where you currently live? (Choose one answer)

No visible outdoor green space or open space (no parks or undeveloped land)

Balcony, terrace or patio with plants in pots

Small yard (less than ¼ acre)

Medium yard (more than ¼ acre, less than an acre)

Large yard (more than acre), not a farm

Farmland/fields/forest

Communal gardens or shared landscaped areas

Other (Please explain)

→

Do you do any of these things to make your area **attractive to wild birds**? (Check all that apply)

Made efforts to reduce bird/window collisions

Avoid use of pesticides

Provide bird bath

Keep cats indoors

Offer native grasses

Offer bird food/feeders

Offer native flowers

Offer native shrubs and trees

Provide bird houses

Seek to have your yard designated as "Certified Bird Habitat" (through Audubon's program) or as "Certified Wildlife Habitat" (through the National Wildlife Federation)

Other (Please explain)

None of the above

About how much money do you spend **food for wild birds**, in a typical year?

$0

less than $10

$10 to $25

$25 to $50

$50 to $75

$75 to $100

$100 to $150

More than $150

Don't know / Not sure

←

→

Other than food for wild birds, about how much money do you spend to **make your outdoor area attractive to wild birds**, in a typical year?

$0

Less than $10

$10 to $25

$25 to $50

$50 to $75

$75 to $100

$100 to $150

More than $150

Don't know / Not sure

← →

In a typical year, **prior to the current pandemic,** about how often did you **observe or photograph wild birds** (on average, across all seasons)?

Daily

Every other day

Twice a week

Weekly

Twice a month

Monthly

Every 3 months

Every 6 months

Once a year

Never

By the time the current pandemic has lasted a full year, about how often do you think you will have **observed or photographed wild birds** (on average, across all seasons)?

Daily

Every other day

Twice a week

Weekly

Twice a month

Monthly

Every 3 months

Every 6 months

Once a year

Never

In a typical year, **prior to the current pandemic,** about how often did you **visit parks or other public area less than 1 mile from your home** to **see, photograph, or feed wild birds** (on average, across all seasons)?

Daily

Every other day

Twice a week

Weekly

Twice a month

Monthly

Every 3 months

Every 6 months

Once a year

Never

By the time the current pandemic has lasted a full year, about how often do you think you will have **visited parks or other public area less than 1 mile from your home** to **see, photograph, or feed wild birds** (on average, across all seasons)?

Daily

Every other day

Twice a week

Weekly

Twice a month

Monthly

Every 3 months

Every 6 months

Once a year

Never

In which of these ways do you find wild birds to be a **nuisance**?

Noise

Damage to landscape plants

Damage to garden (fruit or vegetables)

Droppings on driveway/deck/patio/car, etc.

Damage to your home

Other

None of the above

←

→

The main things currently changing wild bird populations include:

- **Changes in land cover**, creating steady pressure on ecosystems that support bird populations in both urban and rural areas
- **Changes in climate** that have already altered the geographic ranges of bird populations. Many bird species in North America are steadily shifting their ranges northward and/or to higher elevations

The following questions explore your attitudes and opinions about wild birds.

Protecting wild bird habitat in your area is important so that **you, personally,** can enjoy watching wild birds now and in the future.

Strongly disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Strongly agree

Protecting wild bird habitat in your area is important so that **future generations** can enjoy watching wild birds.

Strongly disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Strongly agree

←

→

Protecting wild bird habitat in your area is important so that wild birds can continue to **play their usual roles within the local ecosystem** (e.g. pollination, pest control, seed dispersal, etc.).

Strongly disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Strongly agree

←

→

The most important questions in this survey will ask about whether you would be willing to support some specific additional policies to protect wild birds.

Existing policies to protect wild birds often focus on **habitat restoration** as well as **land management**.

If the proposed policies to help birds are implemented, resources will be required. Costly policies to conserve land are fairly common across the U.S.

At least 33 U.S. states already invest resources in protected lands. The Trust for Public Lands has identified which U.S. states have dedicated funding for land conservation.
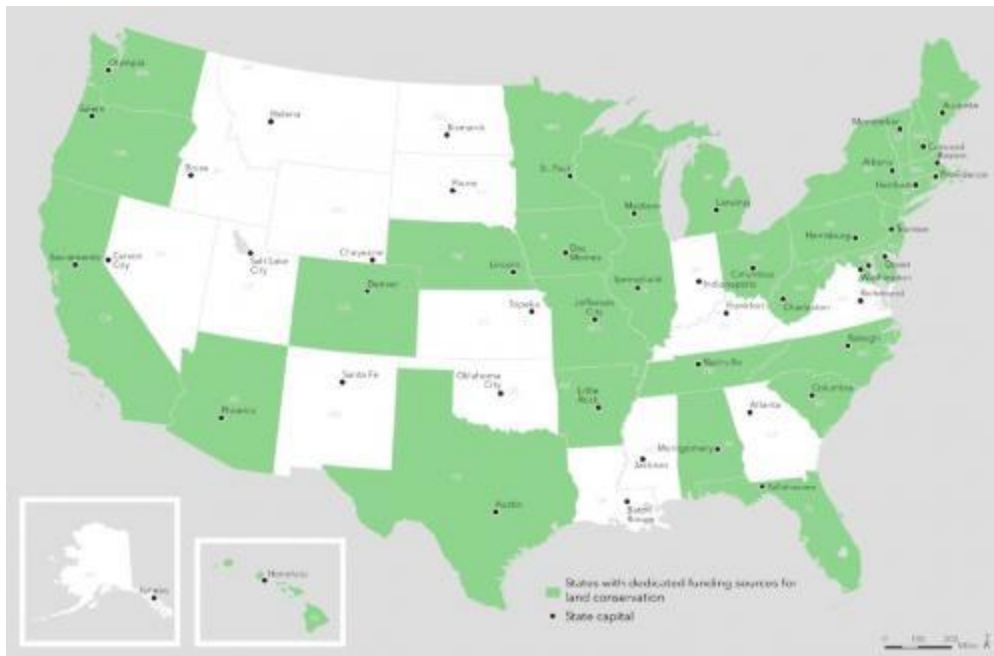
Current **sources of funding** for land conservation were inventoried in 2019 by the Trust for Public Land (reported at www.conservationalmanac.org, National Overview, in their "Conservation Funding at a Glance" document).

Please select those states, **if any**, for which you would like to view information about sources of funding for protected lands. (States with no such dedicated funding at the time of the report are not listed):

Alabama

Arizona

Arkansas

California

Colorado

Connecticut

Delaware

Florida

Hawaii

Illinois

Iowa

Maine

Maryland

Massachusetts

Michigan

Minnesota

Missouri

Nebraska

New Hampshire

New Jersey

New York

North Carolina

Ohio

Oregon

Pennsylvania

Rhode Island

South Carolina

Tennessee

Texas

Vermont

Washington

West Virginia

Wisconsin

←

→

(This inventory was last updated in August of 2019. There may have been some recent changes in some states which are not fully reflected here.)

Maryland	**_Funding Source: Real estate transfer tax (1969)_** Maryland is one of the first states to fund land conservation through a dedicated real estate transfer tax and agricultural transfer tax. At full funding, the transfer tax could generate several hundred million dollars for Program Open Space, the state's primary conservation program.

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Different types of policies can can help wild bird populations. For example, we might:

- **Restore ecosystems** (e.g. wetlands or upland habitat, by planting of native vegetation or removal of invasive species)
- **Enhance habitats** (e.g. choosing bird-friendly native plants for open spaces such as school-yard gardens, or local, city or regional parks)
- **Protect pasture and forests** from conversion to farms or housing developments (e.g. maintaining current open spaces and parks, or acquiring additional land for conservation)

These efforts are encouraged by several laws. Programs to promote bird conservation have also been developed by various federal, state, county and city governments, and by non-governmental organizations across the country. Some examples of policies

←　　　　　　　　　　　　　　　　　　　　　　　　→

You will be asked to choose between two options in each of your upcoming choice tasks:

- Fund a specific **Policy** that supports the future abundance and mix of wild bird species in your area.
- Take **No action**.

The policies described in this survey will not be exact matches to any existing policies. Instead, we will describe a variety of possible policies in terms of their costs and their expected benefits. We wish to know how you would *probably* vote, IF you were asked to choose between the proposed policy and "No action."

The need for these policies will depend on forecasts about what will happen to local wild birds if nothing is done. These forecasts may change as the science improves. This means we need to learn about your policy preferences under different forecasts about future conditions. Each choice task will assume something different about the future of wild birds in your area, if no action is taken.

For each new choice task, please start "fresh." Please assume that the policy described in a given choice task is the ONLY policy being considered.

Check your understanding: Will the description about what will happen with "No action" be the same in all five of your policy choice tasks?

Yes

No

Don't know/Not sure

Incorrect. We will ask you to make your choices based on different forecasts about what is expected to happen with No Action. Why? It is too difficult for a regional survey to accurately predict, for each person, what would happen to their local bird populations if No Action is taken.

By asking about your *likely* choices under a variety of different conditions, we can build statistical models can handle anything within that range. As the science concerning possible outcomes improves, these models will be able to adapt and yield predictions about people's likely policy preferences as the "real" alternatives become more clear.

←

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Potential conservation policies that help wild birds can be **difficult to describe and compare in a small space**.

For each policy, we will provide a simplified description of

- Current conditions (species abundance);
- Results to be expected from the proposed policy; and
- What will happen if no action is taken.

We will use the information for your own first choice task to explain the parts of these policy summaries. We will highlight, in yellow, one part of the summary table at a time.

←

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Each policy description will **"feature"** five common backyard bird species in your region. A **different** set of five species will be featured in each choice task.
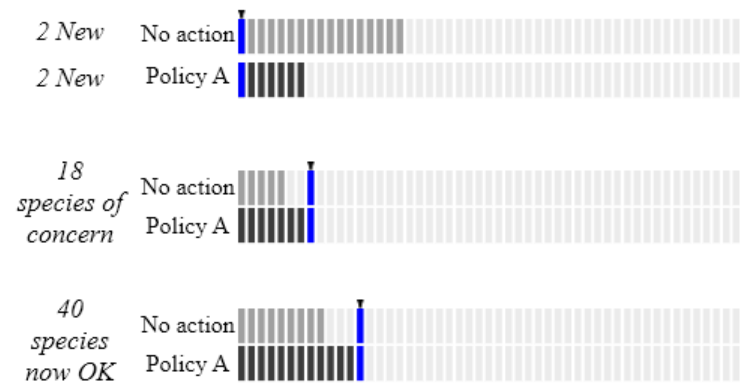
It does not matter whether you know the names of each species. Thus we just show you pictures of five kinds of birds in the top left part of the summary, as highlighted in the yellow boxes below.

Choice 1: Policy A or No action?

Species	Resulting abundance (versus █ = now)
Featured species:	0......... 7,900

No action
Policy A

No action
Policy A

No action
Policy A

No action
Policy A

No action
Policy A

Species NOT featured:	*Average* species abundance, by group

2 New No action
2 New Policy A

18 species of concern No action
Policy A

*40 species now OK* No action
Policy A

Cost of Policy A: $ 100 per year

The species that is most abundant in your region will determine the *scale of measurement* for the abundances of all other species in your region.

The *identical* scale of measurement, highlighted in yellow below, will be shown at the top of *all* of your choice summaries.

The current abundance numbers for each species reflect the most recent actual data for your region.
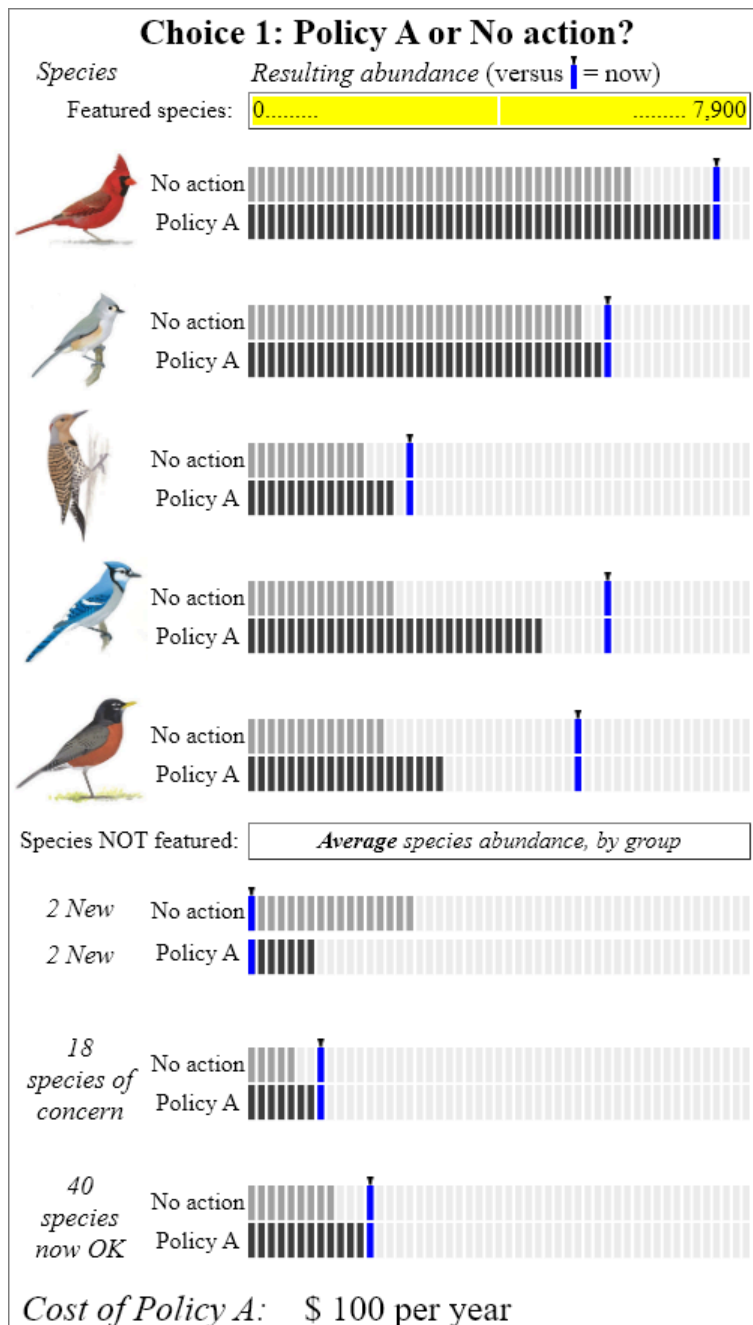
Would you like to learn more about how these current abundance measures are

calculated?

Yes, I'd like to read about the details

No thanks

←

→

It is somewhat difficult, scientifically, to summarize the **total number of birds** present in a region over the course of a year. Many birds move around from season to season, and nobody can be counting birds all the time, the same way, at every possible location.

The **number of individual birds** reported to citizen science projects over the course of a year will depend on:

- How many people report their sightings
- How much time they spend watching birds
- Their levels of expertise

As a measure of overall wild bird abundance, we use data from eBird for each birding "hotspot" in your Bird Conservation Region (BCR). We calculate the total number of birds (of each species) reported at each hotspot over a full year, and **average these annual totals across these hotspots**. We then round these numbers to the nearest 100 to avoid over-stating the accuracy of this measure.

←   →

The **current abundance** of each species in your region is marked with a **blue line**, with a tiny pointer at the top, on the abundance scale for each featured species. Current abundance of birds in each group are highlighted in yellow in the choice summary below.

Unfortunately, wild bird populations have been declining in recent decades. While you may be accustomed to today's levels of abundance, experts expect that these levels will continue to decline if nothing is done.
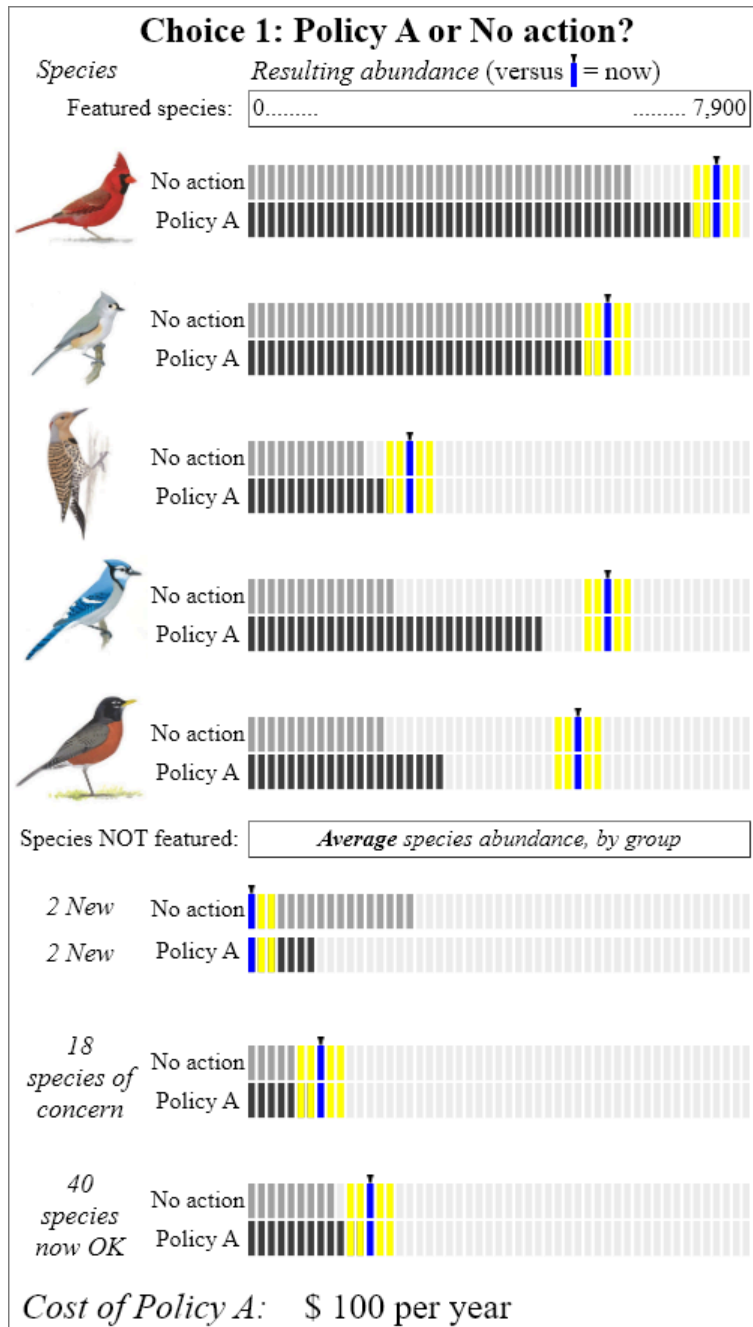
Would you like to read more about declining wild bird populations over the last 50 years?

Yes, I'd like to read more about the decline of bird populations

No thanks

←

→

In 2019, an important research paper was published in the prestigious general-interest journal *Science*.

Decline of the North American avifauna

Summary: Species extinctions have defined the global biodiversity crisis, but extinction begins with loss in abundance of individuals that can result in compositional and functional changes of ecosystems. Using multiple and independent monitoring networks, we report population losses across much of the North American avifauna over 48 years, including once common species and from most biomes. Integration of range-wide population trajectories and size estimates indicates **a net loss approaching 3 billion birds, or 29% of 1970 abundance.** A continent-wide weather radar network also reveals a similarly steep decline in biomass passage of migrating birds over a recent 10-year period. This loss of bird abundance signals an urgent need to address threats to avert future avifaunal collapse and associated loss of ecosystem integrity, function and services. [emphasis added]

Authors: Kenneth V. Rosenberg, Adriaan M. Dokter, Peter J. Blancher, John R. Sauer, Adam C. Smith, Paul A. Smith, Jessica C. Stanton, Arvind Panjabi, Laura Helft, Michael Parr, Peter P. Marra
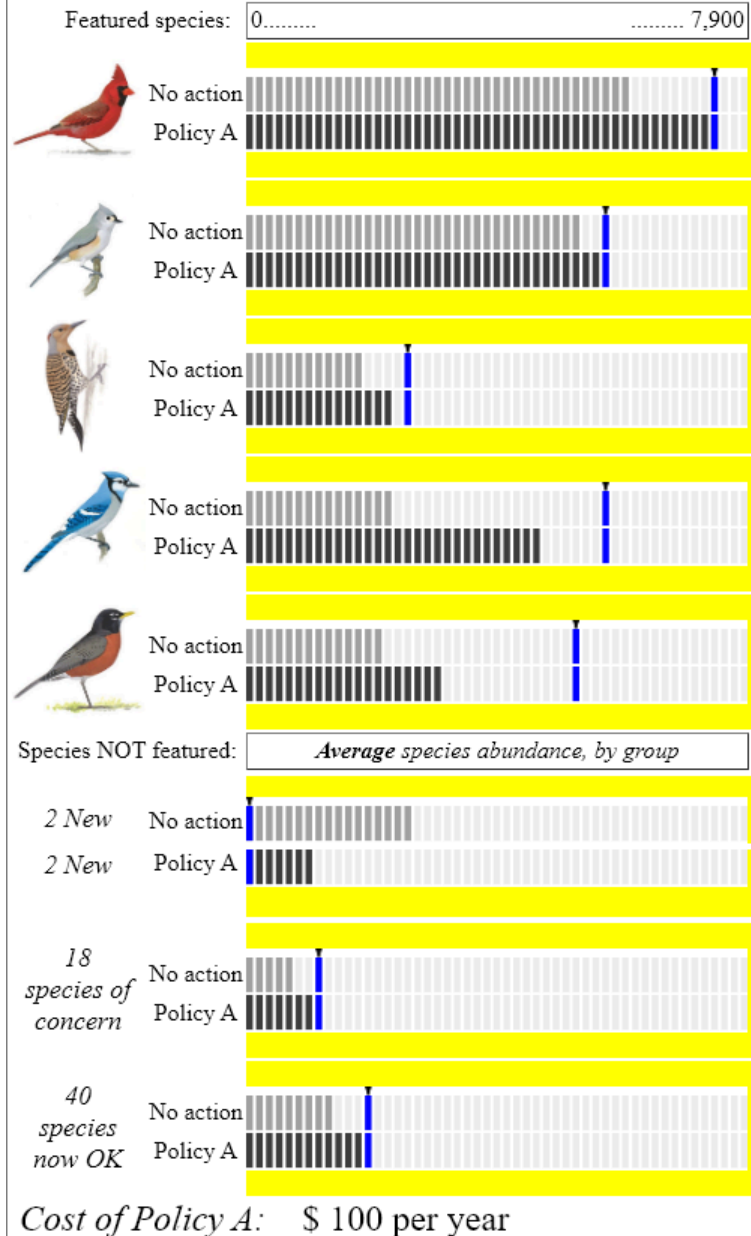
← →

The two sets of bars next to each featured species are "population meters." These little meters show what will happen under each alternative you are being asked to consider.

With **No action**, the **light-gray bars** give a forecast of what is likely to happen to each species. In most (or all) of your choice tasks, populations of these common backyard birds will shrink with no action.

With **Policy A**, the **darker-gray bars** give a forecast of what the policy is expected to do for each species. In most (or all) of your choice tasks, populations of these common backyard birds will be *higher* with the policy than without it.

In your version of the survey, the No action alternative may be on the top or the bottom of each pair. Either way, it will remain in the same position across all of your choice sets.

Featured species: | 0.......... | 7,900

| | No action | |
| | Policy A | |

| | No action | |
| | Policy A | |

| | No action | |
| | Policy A | |

| | No action | |
| | Policy A | |

| | No action | |
| | Policy A | |

Species NOT featured: | *Average* species abundance, by group |

| *2 New* | No action | |
| *2 New* | Policy A | |

| *18 species of concern* | No action | |
| | Policy A | |

| *40 species now OK* | No action | |
| | Policy A | |

Cost of Policy A: $ 100 per year
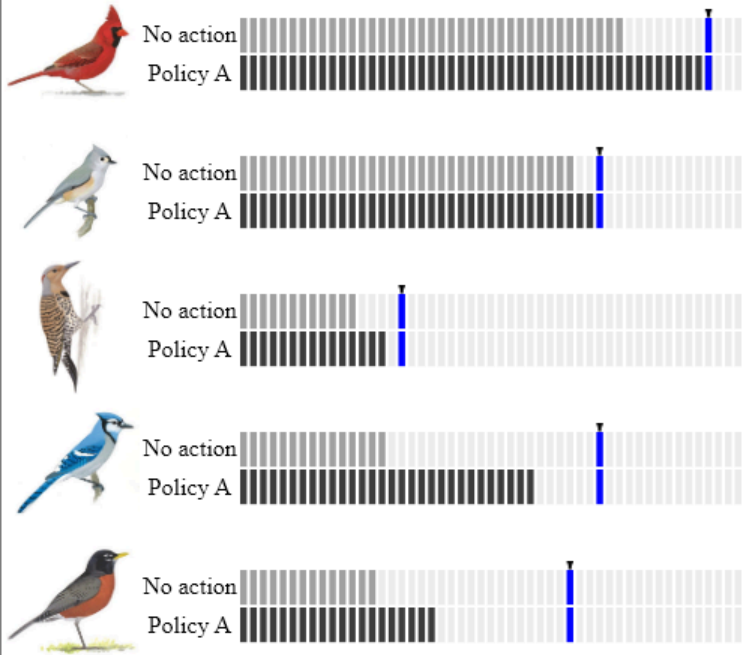
←

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There are many other species of wild birds in each region, besides the five species featured in each choice task. We do not have room to describe all their *individual* levels of abundance with No action or under Policy A. Instead, we use **group averages**. The yellow divider, highlighted below, separates the information for individual species from the information for these groups.

For the average abundance in each of these three groups, we will continue to use the *same scale of measurement* shown at the very top of the table to describe the effects of No action or Policy A on species abundance.
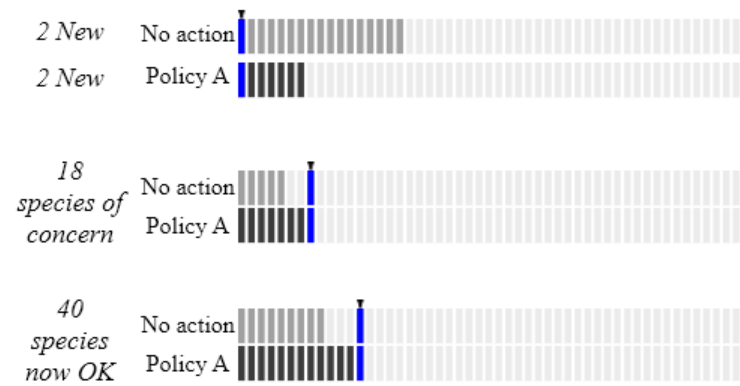
For *groups* of bird species, below the yellow divider, each pair of abundance meters will show the effect of each policy alternative on the **average abundance** of the species in that group. To keep things simple, assume that whatever is the current abundance of *each species* in a group, that abundance will change in proportion to the change in the *average* abundance for that group.

Choice 1: Policy A or No action?

Species — *Resulting abundance* (versus | = now)

Featured species: | 0......... .... 7,900 |

Northern Cardinal
- No action
- Policy A

Tufted Titmouse
- No action
- Policy A

Northern Flicker
- No action
- Policy A

Blue Jay
- No action
- Policy A

American Robin
- No action
- Policy A

Species NOT featured: **Average** *species abundance, by group*

2 New
- No action
- Policy A

2 New

18 species of concern
- No action
- Policy A

40 species now OK
- No action
- Policy A

Cost of Policy A: $ 100 per year

The **first pair of highlighted boxes** in the choice summary below shows **how many NEW species of birds** are expected to move into your area with No action and with Policy A. Changes in climate, land cover, and human populations will lead some species to move beyond their usual geographic range and into new areas. The arrival of these new species can change conditions for other birds already in your region. These new species may compete with existing species for food or habitat.

Aside from the five featured species and the likely new arrivals, there are **many other common backyard bird species** in your area. Experts are *more worried* about some of these species than others. Using actual data for your region, we divide these other species into two groups:

- Species of moderate-to-high conservation concern
- Other species which are currently doing OK

The **second highlighted box** in the table below shows **how many** common backyard bird species in your region, other than the five featured in the pictures, are considered by experts to be "species of concern."
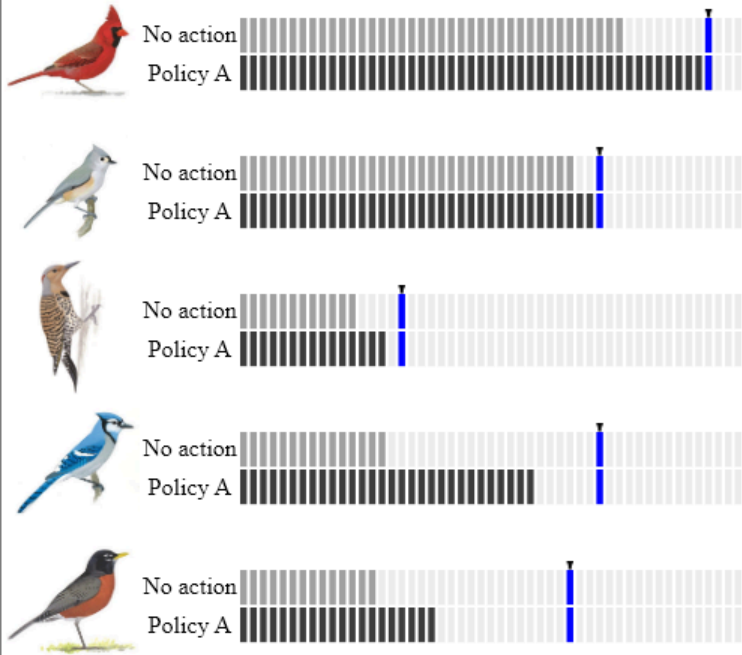
The **third highlighted box** shows **how many** common backyard bird species are considered to be "doing OK," at least for now.

Current average *abundance* for "species of concern" will tend to be less than for species that are currently OK. However, the *numbers of such species* (as shown in the boxes highlighted in yellow) may be greater or smaller, depending upon your region.
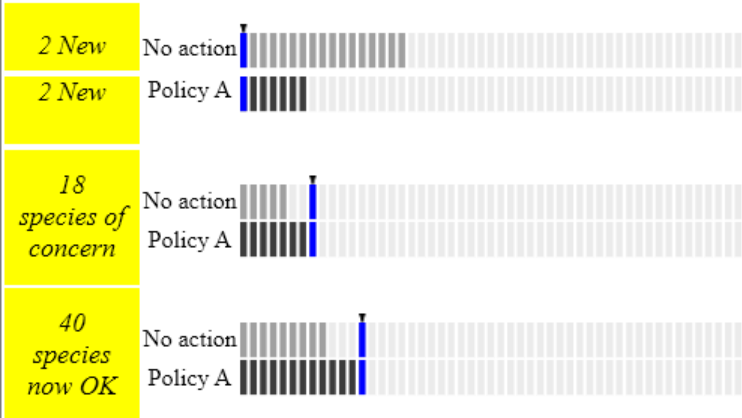
Choice 1: Policy A or No action?

Species — *Resulting abundance* (versus | = now)

Featured species: | 0......... .... 7,900 |

No action / **Policy A** (Northern Cardinal)

No action / **Policy A** (Tufted Titmouse)

No action / **Policy A** (Northern Flicker)

No action / **Policy A** (Blue Jay)

No action / **Policy A** (American Robin)

Species NOT featured: | *Average* species abundance, by group |

2 New / **2 New** — No action / Policy A

18 species of concern — No action / Policy A

40 species now OK — No action / Policy A

Cost of Policy A: $ 100 per year

Policies to protect wild birds come at a cost. That cost could be borne in different ways.

The protection of wild bird habitat could be achieved through **land use regulations** that could result in:

- **Higher prices** for consumers (for example, for housing or agricultural products)
- **Lower wages** for workers (for example, if there are fewer agricultural jobs locally)
- **Lower returns** for land owners, investors, business owners, or farmers and ranchers (if the land cannot be developed)

Alternatively, the land needed for wild bird habitat could be **purchased** and set aside for conservation. The money to pay for this land could come from:

- **Higher taxes**
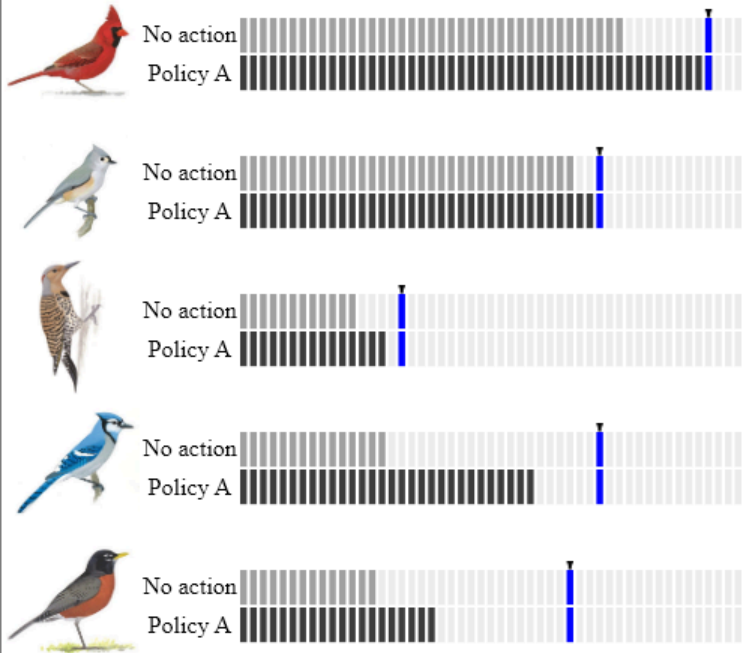- **Shifting** money from other public services

←   →

Assume that Policy A will involve an **on-going yearly cost** if it is continue to support bird populations as described. These costs stem from on-going conservation activities or continuing regulations on land use.

Assume that the costs of land-use restrictions, higher taxes, or diversions from other public spending will ultimately reach your household.
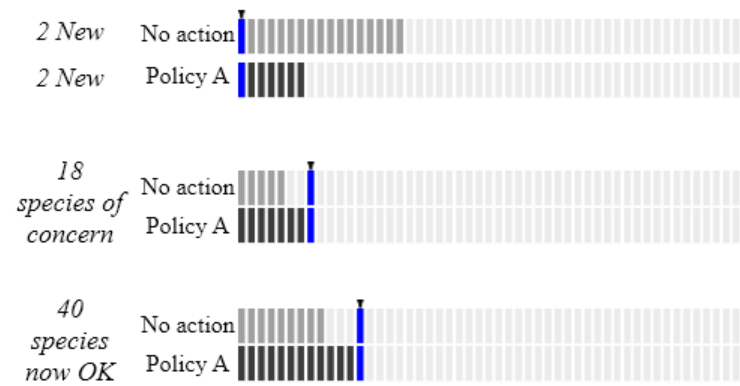
To pay for Policy A, assume the **unavoidable yearly cost to your household** will be as highlighted in the final row of each choice summary. In contrast, the "No action" policy would have no financial cost for your household.

Choice 1: Policy A or No action?

Species — *Resulting abundance* (versus | = now)

Featured species: [0......... .... 7,900]

	No action	
	Policy A	
	No action	
	Policy A	
	No action	
	Policy A	
	No action	
	Policy A	
	No action	
	Policy A	

Species NOT featured: | **Average** *species abundance, by group* |

2 New	No action	
2 New	Policy A	
18 species of concern	No action	
	Policy A	
40 species now OK	No action	
	Policy A	

Cost of Policy A: $ 100 per year

← →

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Your opinion matters. On the following pages, we will ask you to "vote" on some **advisory referenda** concerning different possible policies to protect wild bird populations in your area. Please consider each policy choice separately, and assume that the options presented to you in each choice are the only alternatives that are available when you need to choose.

Your answers cannot be connected to you as an individual. However, the results from this study will be provided to policy-makers in your region, so your "vote" has the potential to affect outcomes you care about.

Check your understanding: The purpose of this study is:

Merely to satisfy the curiosity of the research team

To provide policy-makers with evidence about people's willingness or unwillingness to bear the likely costs of future policies to protect wild bird populations

Don't know, Not sure

→

Each choice summary you see will show the *current* abundance of bird species in your region, based on the most accurate data available. These current levels are shown by the blue line on each "abundance meter."

Of course, no one can know **exactly** what will happen to local backyard bird populations in any given area in the future.

However, when you make your policy choices between Policy A and No action, please assume that the best available scientific evidence supports the estimates shown for the future abundance of backyard bird species in your area, with and without the policy.

Check your understanding: For each policy choice you are asked to consider, you should:

Assume that the predictions about what will happen to wild birds reflect the best available science

Mentally adjust these predictions so that they match your own personal opinions

Don't know/Not sure

←

→

Based on your answer, here is a clarification. We need to understand which policies people would prefer, **conditional** on the best available science. As it becomes more clear what will happen to bird populations with No Action, and what could be achieved through different types of interventions, we need to understand how people's policy preferences might change.

If you assume something different about these policies from what is described, we cannot know what your different assumptions have been, and **our analysis of your choices will be misleading**.

Please assume that conditions under each policy alternative will be pretty much as we describe.

←
→

For each of your upcoming set of five (5) policy choice tasks:

- Please vote as you would **on a real and secret ballot**, where **your own household's money is on the line** for the yearly cost that would need to be paid, either directly or indirectly, under each policy.

- **Consider each policy choice *by itself***, as if it were the ONLY choice on your ballot. (We ask you to consider several different policy choices so that we can get a better picture of your policy preferences under different conditions.)

- Assume that any taxes paid by households or businesses under a given policy would be **legally guaranteed to be used only for the designated purpose**.

←   →

There are no "right" or "wrong" answers to these policy choice questions. Different people will place different importance on protecting wild birds. Given their incomes and the other demands on their household budgets, reasonable people may decide that:

- The cost of a proposed Policy may be just too high, regardless of how desirable the benefits of that policy might be.
- The benefits from a Policy may not be great enough to justify its ongoing cost to your household, even if that cost would be manageable.

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Finally, in surveys like this, people also sometimes feel like the research team really wants them to choose a particular answer. This is not the case. In each choice task, please choose the policy that you would select if you were actually voting on a real and secret ballot.

Verify your understanding: The research team wants me to vote for:

Some active Policy to protect or enhance habitats for wild birds, rather than No Action
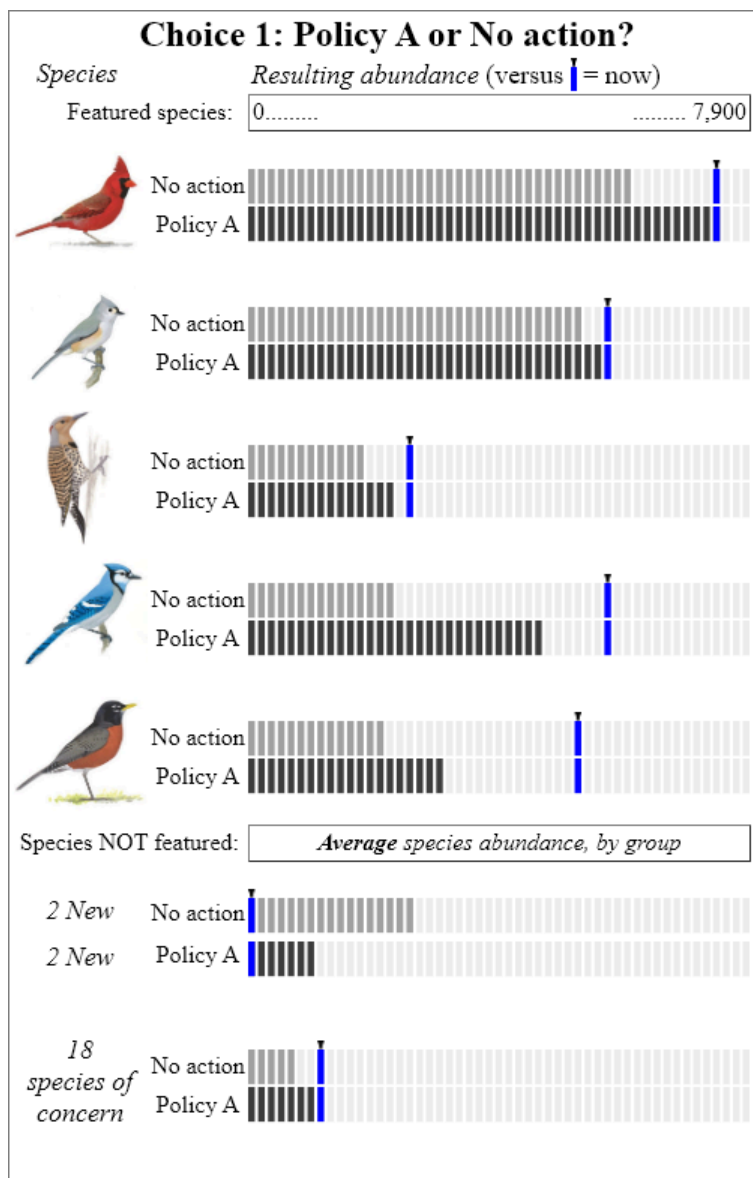
The policy of No Action

Whichever alternative, in each choice task, would be best for me and my family
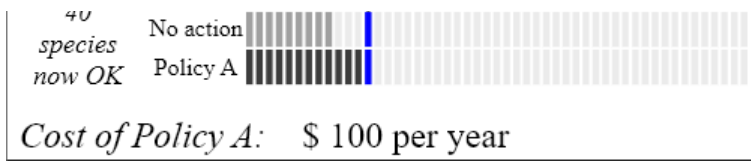
←   →

Choice Task #1: Current conditions will not continue into the future. With NO ACTION, bird populations will change. Suppose you are asked to vote on **Policy A**, which would help wild birds in your area (as shown below).

This choice task features **five of the top-25 species** of backyard birds in your area now. But notice that it also summarizes whether new species will arrive. It shows what will happen to **all the other common backyard bird species** around you, whether they are "species of concern" or species that are currently doing OK.

However, you should also take into account the **cost of the policy** to your household. Everyone who takes this survey will see a different version of each proposed policy. In some cases, the benefits from the policy will probably not justify the cost of the policy. (Our study is designed to include some such cases, for at least some people.)

Choice 1: Policy A or No action?

40
species
now OK No action | Policy A

Cost of Policy A: $ 100 per year

If these two alternatives were the ONLY options available, which would you vote for?
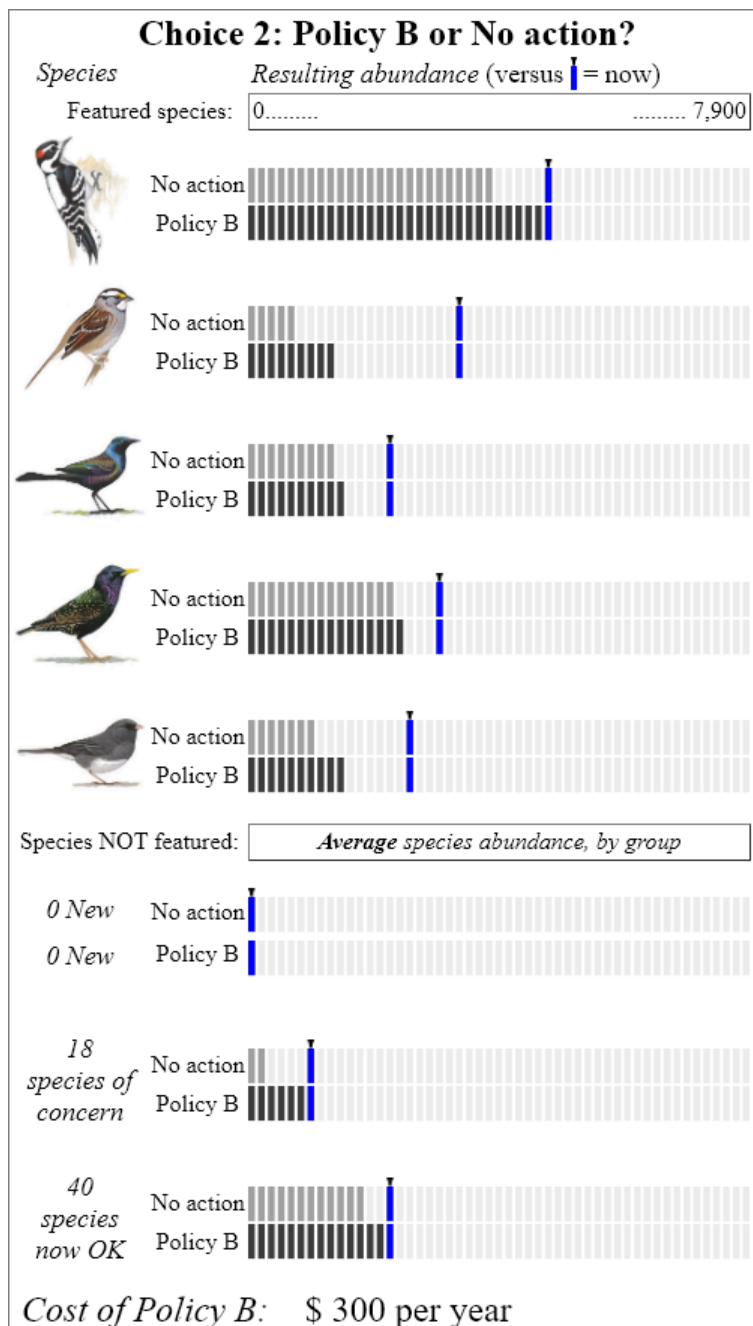
Policy A

No action

←

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Choice Task #2: Now forget about Policy A and the conditions described for the previous choice task. Assume that forecasted bird populations with No action are different.

Notice that this choice task features **a different set of five species** from the top-25 species in your area. This choice task also makes different assumptions about what will happen to all of the other backyard species in your area if no action is taken. Again, you will likely want to consider the cost of this policy to your household.

Under these different conditions, suppose you are asked to vote on **Policy B** that would help wild birds in your area (as shown below).

Choice 2: Policy B or No action?

Species	Resulting abundance (versus ┃ = now)
Featured species:	0......... 7,900

Species NOT featured: | *Average species abundance, by group* |

0 New — No action
0 New — Policy B

18 species of concern — No action / Policy B

40 species now OK — No action / Policy B

Cost of Policy B: $ 300 per year

If these two alternatives were the ONLY options available, which would you vote for?

Policy B

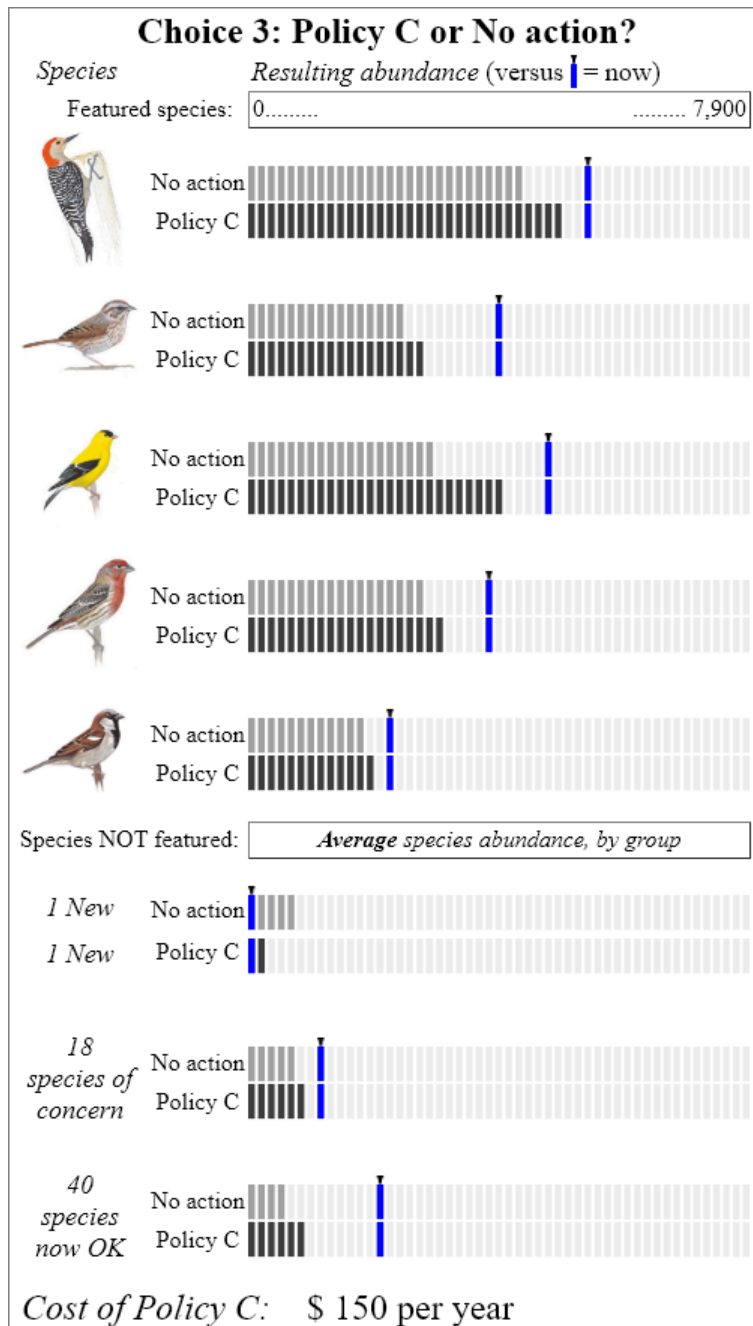No action

←   →

Choice Task #3: Ignore the conditions described for the previous two choice tasks.

This choice task features a third set of five species drawn from the top-25 species in your area. These particular species have not been featured before. Forecasted bird populations with No action are different yet again. The cost of the policy to your household is also likely to be different than in your previous choice tasks.

Under these new conditions, suppose you are asked to vote on **Policy C** to help wild birds in your area.

Choice 3: Policy C or No action?

Cost of Policy C: $ 150 per year

If these two alternatives were the ONLY options available, which would you vote for?

Policy C

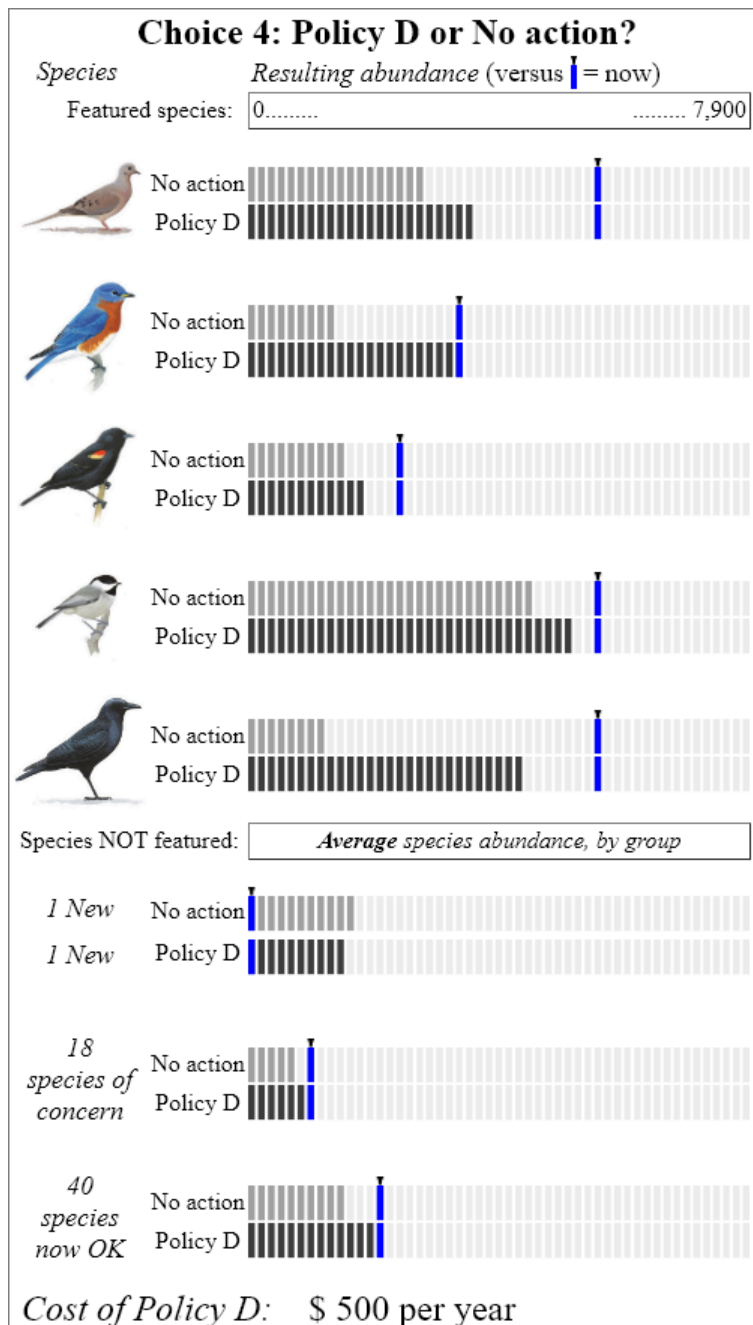No action

← →

Choice Task #4: Again, ignore all of the previous three choice tasks.

Five different species are featured, again drawn from the top-25 in your area. Forecasted bird populations in the usual three categories, with No action and with Policy D, are again different. So might be the cost of this policy.

Under these different conditions, suppose you are asked to vote on **Policy D** to help wild birds in your area, as shown below.
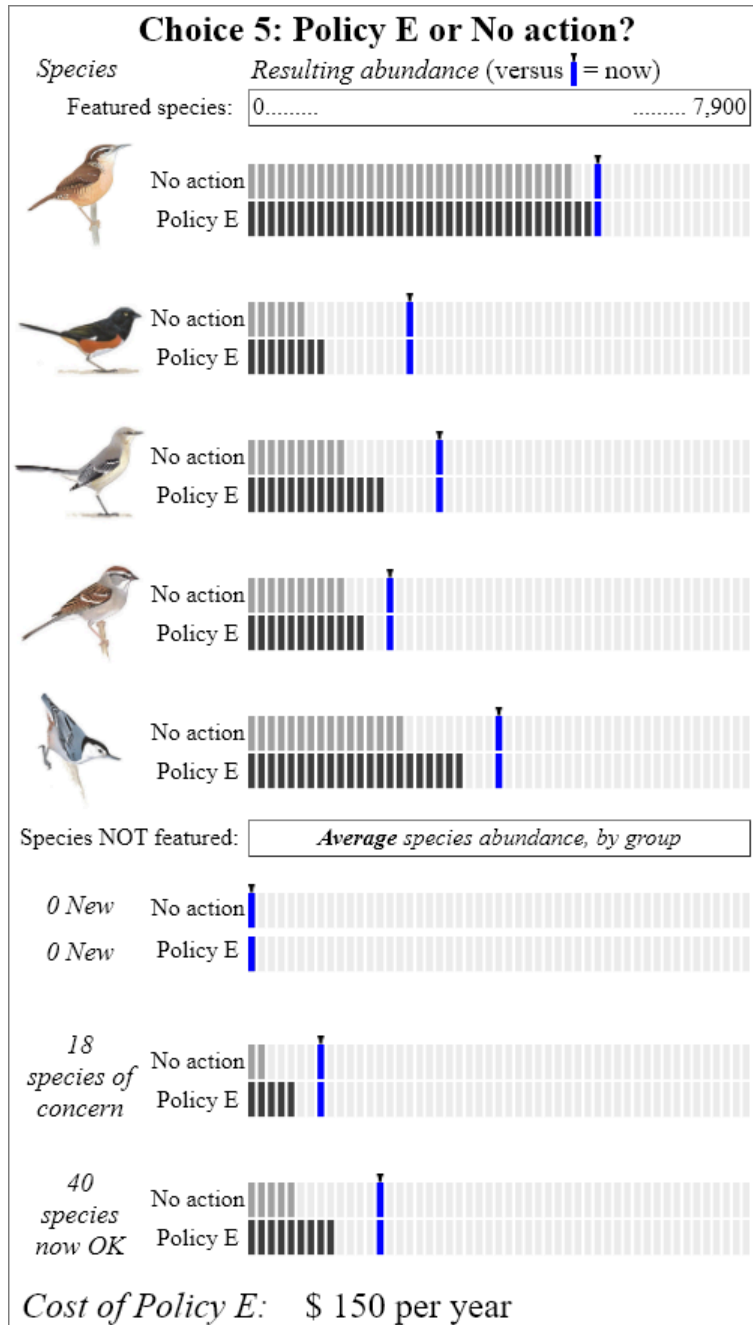

If these two alternatives were the ONLY options available, which would you vote for?

Policy D

No action

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Choice Task #5: Finally, ignoring the conditions described in all of your other choice tasks, now assume that forecasted bird populations with NO ACTION are as shown in this summary. Under these new conditions, suppose you are asked to vote on **Policy E**, at the specified cost, to help wild birds in your area.

Choice 5: Policy E or No action?

Species	Resulting abundance (versus ▍ = now)
Featured species:	0......... 7,900

Species NOT featured: *Average species abundance, by group*

0 New — No action
0 New — Policy E

18 species of concern — No action / Policy E

40 species now OK — No action / Policy E

Cost of Policy E: $ 150 per year

If these two alternatives were the ONLY options available, which would you vote for?

Policy E

No action

Why did you prefer No action?

Wild birds in my local area are not worth that much to me

Nature must run its course without intervention

Policy E should not be paid for with my tax dollars

The trade-offs involved made No action the best alternative for me

The cost of Policy E is too high for my budget

There are more pressing needs for my tax dollars than conservation of bird habitat

The choices were difficult to think about (or relate to)

I do not believe that Policy E would work as claimed

I believe wild birds are a nuisance

Other (please specify)

Thinking back over the policy choices you were asked to consider, **how confident were you** (generally) about the potential for these policies to:

Protect locally common bird species from becoming completely extinct:

Very confident

Somewhat confident

Not confident at all

Keep locally at-risk bird species from disappearing from your area

Very confident

Somewhat confident

Not confident at all

Help locally at-risk birds become more abundant

Very confident

Somewhat confident

Not confident at all

←   →

Across all five pairs of policy alternatives, to which features of the policies did you pay the **greatest** attention? (Check all that apply)

The abundance of each of the five bird species in the pictures

The number of new species appearing in your area

The average abundance of the new species appearing in your area

The average abundance of other current species of conservation concern

The average abundance of other current species NOT of conservation concern

The yearly cost of the Policy

I paid roughly equal attention to all features of the policy

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Did you **almost completely ignore** any of these features of the policy alternatives? (Check any features that you pretty much completely ignored)

The number of new species appearing in your area

The average abundance of the new species appearing in your area

The average abundance of other current species of conservation concern

The average abundance of other current species NOT of conservation concern

The yearly cost of the Policy

← →

Consider the various policy alternatives you were shown. Were you concerned about any **other possible effects** of these policies, besides their costs and their effects on wild birds?

No, not really

Yes (please explain)

In your opinion, society's present **level of effort to protect habitat** for existing species is:

Too high

Adequate

Too low

Don't know/Not sure

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Please tell us a little about how you view conservation policies by indicating how much you agree with each of these statements.

Conservation policies to enhance wildlife habitat should prioritize **familiar species** over **species I don't recognize**

Strongly disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Strongly agree

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Do you tend to notice, at least occasionally, wild birds that live around your house or your neighborhood?

Yes

No

→

What would you say is your level of birding expertise?

Novice

Novice/Intermediate

Intermediate

Intermediate/Advanced

Advanced

←   →

In the survey thus far, we did not name the individual species, since the policies we asked you to consider focused on overall biodiversity, not particular species. Still, we'd like to check whether you can identify some of the common backyard species in your broad region of the U.S.

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Which of these birds is a Dark-Eyed Junco? (click one)

None of these

Don't know/Not Sure

← →

Which of these birds is an American Robin?

None of these

Don't know/Not sure

Which of these birds is a House Sparrow?

None of these

Don't know/Not sure

←   →

Which of these birds is a Mourning Dove?

None of these

Don't know/Not sure

←

→

Are you a "lister" who keeps tract of the species they have seen? (select any that apply)

Yes, I keep a "life list." My life list number of species is about:

Yes, I keep a "year list." My year list number of species is about:

Yes, I keep a "backyard list." My backyard list number of species is about:

No, I am not a "lister"

←

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Check all types of birds you are interesting in observing around your home or traveling to observe elsewhere.

Waterfowl (ducks, swans, geese, etc.)

Wading birds (shorebirds, herons, etc.)

Birds of prey

Perching birds (songbirds and flycatchers)

Grouse, quail, turkeys, pheasants, etc.

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So-called "Citizen Science" projects recruit ordinary people to help gather data for scientific research. For each of the following projects related to wild bird populations, please indicate your level of familiarity or participation. (Please choose one answer per project)

The "eBird" citizen science project:

I am unfamiliar with this project

I have heard of this project, but have not signed up

I participate, but report observations only rarely, if at all

I participate, but report less than half of my observations

I participate, and report more than half of my observations

I participate, and report almost all of my observations

Project FeederWatch:

I am unfamiliar with this project

I have heard of this project, but have not signed up

I participate, but report observations only rarely, if at all

I participate, but report less than half of my observations

I participate, and report more than half of my observations

I participate, and report almost all of my observations

←

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Different groups have different interests in birds. In addition to bird watching, do you also hunt birds?

Yes

No

← →

What types of birds do you typically hunt?

Waterfowl

Upland game birds

Other (please specify)

Do you ever travel more than one mile from home, specifically to see birds?

Yes

No

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If you are NOT making a special trip to try to see a reported rare bird, what is the **greatest distance** you would consider traveling, *one way*, for a regular *single-day* birding trip?

10 miles or less

11 to 20 miles

21 to 30 miles

31 to 50 miles

51 to 75 miles

76 to 100 miles

101 to 125 miles

126 to 150 miles

151 to 200 miles

201 miles or more

What is your ethnicity? [Categories to match the U.S. Census Bureau]

Hispanic

Non-Hispanic

Prefer not to say

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What is the highest level of education you have completed?

Elementary (K-6)

Middle/High School (7-12)

Some College (including Associate Degree)

College Degree

Some Graduate School

Master's Degree

Doctoral Degree

Other (please specify)

Prefer not to say

←   →

Which of the following categories **best** describes your current employment status?

Self-employed or small business owner

Employee, working full-time

Employee, working part-time

Not employed, looking for work

Not employed, NOT looking for work

Retired

Disabled, not able to work

Full-time student

Other (please specify)

Prefer not to say

How many children under 18 years of age live in your household?

None

1

2

3

4 or more

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Which best describes your current **marital status**?

Married, or cohabiting/living with a partner

Widowed, divorced or separated

Never married

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Politically speaking, do you usually think of yourself as:

Conservative

Moderate

Liberal

Prefer not to say

←

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Since the beginning of the pandemic, has your household income

Stayed about the same

Increased

Decreased

Prefer not to say

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Any comments or feedback for the research team?

→

Thank you for providing the information requested in this survey. Your contribution is important.

Do you wish to receive (by email, when the research is completed) a digital copy of the main scholarly paper produced by this study?

Yes, using this email address (please specify)

No, I do not need to receive a copy of the main scholarly paper

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