Press Release – NatureServe Customers

NatureServe Launches New Portal That Puts the Most Comprehensive Biodiversity Data at Your Fingertips Explorer Pro is a one-stop-shop that helps users make defensible conservation decisions by bringing together the best available data on imperiled species and ecosystems across jurisdictions for North America through an intuitive, easy-to-use interface

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[Summary] Today NatureServe, in collaboration with a network of partner programs across the United States and Canada, is launching the new Explorer Pro web portal and biodiversity data analytics suite. This platform provides researchers, industry, and government (for example, land managers at the Bureau of Land Management) with one-stop data and analytics shop to inform multi-jurisdictional environmental assessments, planning efforts, and land use projects. The solution saves users hours of manual data wrangling and analysis work by giving users easy access to near real time, best available biodiversity data products across jurisdictions, sourced from the NatureServe scientific partner network. Explorer Pro provides a suite of easy-to-use analytic tools optimized to the underlying data enabling decision makers to conduct science-based environmental conservation with speed, certainty, and confidence.

[Opportunity/problem] For almost fifty years NatureServe and a network of partner programs across North America have been working together to collect, aggregate, and refine a vast amount of high-quality, standardized data on the confirmed locations and identities of species and ecosystems. Core data types include field surveys noting species observed by time and location, and ecosystem classification, distribution, and condition. These data products also include the development of new types of data critical to improved decision-making like habitat suitability modeling, which provides insights on where specific species might be present based on what's known about their habitat requirements. The models, in combination with confirmed location data, are powerful tools for scientists allowing users to see a more comprehensive biological picture across the landscape of where species and ecosystems are present – even in areas never, or not recently, surveyed on-the-ground. These data are rich, structured, and highly valuable, vetted by a highly qualified network of conservation professionals and does not exist anywhere else. Despite this, many decision-makers are not making use of this unique dataset because it is not currently accessible online across multiple jurisdictions presenting a timely opportunity to address this need.

Historically, the lack of stakeholder access to an aggregated data source across jurisdictions has required stakeholders to manually combine data-sets and has contributed to inefficient and duplicative data collection and aggregation efforts industry-wide. This has made it difficult and time consuming for land use decision makers and stakeholders to assess environmental impact and design effective conservation strategies. At times this has led to decisions being made without the data essential for successful outcomes. Providing access to these data and analytical tools in one easy-to-use interface spanning multiple jurisdictions can reduce project planning delays, streamline land use decision-making, and otherwise support users in accurately evaluating, avoiding, or mitigating negative impacts to biodiversity.

[Approach/Solution AND Customer Experience] NatureServe has embarked upon the ambitious project to create an integrated online tool that offers users high-quality data from its Network of authoritative data provider partners and other trusted sources. Explorer Pro is designed as a win-win for all conservation stakeholders. Data consumers can access datasets relevant to their area of interest, outputs, and goals. The user will first identify their area of interest on the map. Based on the targeted area, the tool analyzes underlying datasets from multiple sources to provide the user with known information on the presence of imperiled species and specific habitats that could be impacted based on the project type and location. For example, if the user is siting a wind energy production facility, the tool intelligently highlights potential impacts to known or model predicted aerial species in the area while identifying the underlying dataset for more in-depth analysis, saving the user hours of manual data analysis work and pointing them in the right direction to identify and fill data gaps. Users can upload their own datasets to visualize them in the same project space and can export customizable reports and visualizations for use in their decision-making.

[Customer Testimonial] "NatureServe's Explorer Pro helps me find the signal in the noise of all the biodiversity data out there," said William Howard of the Bureau of Land Management in June of 2021 upon testing of the pilot

version of Explorer Pro. "As a land manager for a federal agency, I'm the middle-man between the folks collecting data on the ground and the decision makers. I must bring the best data to the decisions we need to make. If we allow grazing or oil exploration in the wrong places, we could harm endangered species or spend taxpayer money mitigating impacts to species found after a project begins. I used to spend a lot of time bringing together data myself – every time I needed it. It was a clunky and frustrating process. With the new Explorer Pro, I have all the data at my fingertips. NatureServe ensures all data collected for species on and around BLM lands is aggregated and standardized so I have confidence that I am using the best available data when making critical land use decisions." Users of Explorer Pro will be given the opportunity to connect directly with NatureServe's Network of partner programs who have unique expertise in the biodiversity of their jurisdiction – including notifications about additional datasets, tools, and expert services to support local regulatory permitting processes and find solutions to more complex land use and conservation planning projects. This feature incentivizes partner programs to deliver the highest quality, near real time data to the Explorer Pro platform improving the user experience and in turn increasing end user data consumption.

[Network Program- Data Provider] "Explorer Pro responsibly delivers the right data to clients who need it. Best of all, it has directed new clients to our program that we are working with locally on conservation analyses and planning," said Jeff Bridges, coordinator of the Virginia Natural Heritage Program. Billie Jean King of Michigan Natural Features Inventory added that "with Explorer Pro, citizens in Michigan and its neighboring states are making better decisions with better data for better outcomes for biodiversity."

[Leader quote here] "NatureServe Explorer Pro brings the most comprehensive and scientifically rigorous biodiversity dataset for the Western Hemisphere into the hands of decision-makers at a critical time for our planet." Said Sean O'Brien, NatureServe CEO.

To learn more, visit www.NatureServe.org.



Customer FAQ (Agency Users):

- Q: How is Explorer Pro different from the regular Explorer tool?
- A: Explorer Pro provides users with subscription access to more detailed spatial data than is available to the public on Explorer.
- Q: When would I use Explorer Pro versus a state Environmental Review Tool?
- A: Explorer Pro offers standardized species location data from anywhere in the United States and Canada for users who need access to data from multiple jurisdictions or who need to do preliminary project planning and environmental risk assessments. Explorer Pro will also connect users directly with datasets, expert services, and environmental review tools from our network of partner programs to support local regulatory permitting processes.
- Q: How much will it cost for me to get nationwide access to precise data?
- A: See our subscription pricing page for details. Explorer Pro offers multiple subscription levels to provide users with plans that can be tailored to meet their needs and budget.
- Q: How will I be able to download the data into my own proprietary system for GIS analysis?
- A: Subscribers to Explorer Pro will have access to the system's online interface as well as a library of APIs that will allow them to integrate data from Explorer Pro into their proprietary system.
- Q: Does your API accept a request with a shape boundary and return species locality data?
- A: Yes.
- Q: How can I ensure that the data is both timely and accurate?
- A: Explorer Pro will have near real-time update of content aggregated by NatureServe from its Network of data provider partners.
- Q: Can I customize my maps, reports, and other visualizations?
- A: Yes, Explorer Pro will allow users multiple options to customize their map visualization and reports.
- Q: Can I add other data sets and still use your basic reports?
- A: Explorer Pro will allow you to add externally hosted map layers that have a publicly available REST endpoint. If you require the ability to integrate a proprietary dataset, you may wish to explore integrating with the Explorer Pro API instead of through the interface.
- Q: Why don't you have better data on common species?
- A: The current scope of Explorer Pro includes data developed by the NatureServe Network, which focuses its attention on imperiled species and ecosystems. It may eventually expand to include data from other sources which will provide better content on more common species.
- O: Will Explorer Pro guarantee that I can get access to data for all 50 states?

- A: You may visit our data coverage map to confirm the extent of data available through this subscription. We will strive to offer complete coverage for detailed spatial data on documented, likely, and potential presence of species in all 50 states. In cases where we are unable to secure permission to serve data for a given jurisdiction at the desired resolution, we will provide public resolution spatial data, with built-in linkages to connect you with our local partner to directly supply you with augmented data that may be required for your project.
- Q: How can I prove that the data are reliable enough to guide regulatory decision-making processes like NEPA?
- A: Visit our data certifications page to view the status of regulatory and voluntary certification standards that recognize and cite NatureServe Network / Explorer Pro data as a reliable source.
- Q: Will the system maintain a running archive of data if we need to reference or defend data used for past decisions?
- A: The system will allow users to save reports to their profile and download data records that have served as a basis for past decisions. The system will not have daily snapshots that allow users to revisit and reanalyze an area based on data from a previous date in time.
- Q: Can we assume that the data will be improved every year?
- A: Yes, the data will be refreshed frequently, much more often than annually. You may visit our data status page to view metrics of the number and frequency of data updates over a given period and other statistics about the data.
- Q: What if my agency has a policy to only use open data or to not sign a license agreement?
- A: You may visit NatureServe's open data site, NatureServe Explorer, which offers data without requiring a subscription or signed data license.
- Q: How do I share back new data I have developed, or submit corrections to data errors?
- A: You may submit corrections via the contact us form. You may share new data by contacting the local Network program for the locality where the data was collected.
- Q: If a user retires or leaves the agency, can their stored reports/queries be transferred to someone else?
- A: Each subscriber organization will have an organization admin who could inherit saved reports from users when their accounts are suspended.
- Q: Will contractors hired by my agency be able to access the system?
- A: Yes, if authorized by your agency subscription administrator.
- Q: How many users can access the system at once? Limited or unlimited seats?
- A: Subscription terms will indicate the maximum number of users allowable within an organization license.

Customer FAQ (Industry Users):

- Q: How can we be confident that Explorer Pro results are of sufficient quality to inform infrastructure investment plans?
- A: See our data quality metrics scoreboard for transparency about number of records, quality, and level of precision available to subscribers.

- Q: Does Explorer Pro provide authoritative data that will stand up in court?
- A: Yes see our data certifications page. These data are defensible in court, subject to limitations of current legal precedents as detailed on this page.
- Q: How can I use this data together with other data, such as information on water quality, cultural resources, or connectivity areas?
- A: You may add data layers if they are available with a public REST endpoint. Alternatively, you may use the Explorer Pro API to integrate with your own local datasets.
- Q: Is the data actually consistent across jurisdictional boundaries?
- A: See our data transparency metrics scoreboard for details on the level of standardization, accuracy, precision, and currency of data.
- Q: What happens to project boundary data that I upload into the system?
- A: Project boundaries that you submit are accessible only by authorized administrators from NatureServe and the network partner program in the jurisdiction where the project boundary occurs if needed for their expert review.
- Q: How can I access the most precise data needed for decision making?
- A: Users may subscribe to access precise data at the premium tier. See our data coverage map to confirm which jurisdictions' data are included in the premium tier.
- Q: How much does it cost?
- A: Visit our subscription pricing page for details. Explorer Pro offers multiple subscription levels to provide users with plans that can be tailored to meet their needs and budget.
- Q: Are there data that are fuzzed or removed for other reasons?
- A: Visit our data transparency metrics scoreboard for details on the accuracy, precision, and currency of data.
- Q: Does use of NatureServe data mean that I comply with regulations or other certification requirements?
- A: Visit our data certifications page to view the status of regulatory and voluntary certification standards that recognize and cite NatureServe Network / Explorer Pro data as a reliable source.
- Q: Do I need special software to use Explorer Pro?
- A: No, all you need is a web browser.
- Q: What if I only want to download the data once and not use it after that?
- A: Explorer Pro is offered on an annual subscription basis. Please visit our custom data request page to get a quote for a one-time data download.

Stakeholder FAQ (Data Provider):

Q: How are the data sharing restrictions applied?

- A: The Explorer Pro permissions dashboard allows each Network data provider to register the data sharing restrictions for their program. New users are granted access to the data that is authorized for that access level per jurisdiction according to the permissions rules.
- Q: How will you prevent re-distribution of sensitive data?
- A: Terms of use will clearly specify redistribution of all data is prohibited. Customers who are found to have violated the terms of use will have their account suspended.
- Q: How will NatureServe ensure that only the right people have access to the data?
- A: Users will provide information through a user registration form that allows NatureServe to evaluate their right to access data according to previously established data sharing permissions with each data provider. Users will accept terms of use prior to gaining access to data.
- Q: Will the system allow data sharing permissions to be assigned by a registered organization to a contractor operating on their behalf?
- A: Agency organization administrators may grant access to data to a contractor through their organization subscription.
- Q: How do you make sure users that are no longer authorized have their access/credentials removed? How often will a user's credentials be re-verified?
- A: Individual users will be grouped under an organization subscription, which will be subject to an agreed upon renewal cycle. Each organization will have a named administrator to police and regularly update their members, e.g. if an employee leaves the organization.
- Q: Will Explorer Pro allow me to fuzz/obscure the location data for highly sensitive species?
- A: The data provider/permissions dashboard will allow you to select from one or more options for obscuring sensitive species location data by client type.
- Q: Will Explorer Pro allow me to deny data to customers who have betrayed our terms of use?
- A: You may use the data provider dashboard to flag potential violations of your terms of use by a customer so that NatureServe can take the appropriate action, including disabling or suspending the user's account.
- Q: Can I see who is accessing my data?
- A: The data provider dashboard will provide a record of all registered customers with access to data from your jurisdiction, the number of data requests, and amount of revenue earned.
- Q: Can we find out about queries as they are occurring?
- A: The data provider dashboard analytics will be updated in real-time, and will allow Network data providers to register for periodic reports at the frequency they prefer, e.g. weekly, monthly, quarterly, annually.
- Q: What happens if a user submits a project that is only within my state? Where and how will the customer get the most up to date data?

- A: Users will register and subscribe to access Explorer Pro for a multi-state region. Individual projects may be contained within a single state. To ensure the most up to date information is aggregated and delivered to users, Explorer Pro will be designed to also connect them with local partners who may provide supplementary state-level data and locally relevant customer support such as expertise about the given location or species.
- Q: How can you ensure that the customers will not bypass my program's state Environmental Review Tool (ERT) by using the Explorer Pro?
- A: Explorer Pro will not offer a regulatory review service that competes with a state's ERT. Rather, it will connect users with integrated linkages from the national tool to state tools and datasets that are available within the project boundary.
- Q: Will participating in Explorer Pro result in more sustainable support for my program by connecting my program expertise directly with clients?
- A: Explorer Pro will attract national and regional customers to subscribe to information products including content from our network of local data provider partners. All products delivered through Explorer Pro will explicitly cite the data provider partners' content, with links back to your program website and state data delivery tools.
- Q: Will I be able to access my neighboring states' data to improve cross-boundary projects and data improvements like conservation status ranking?
- A: Yes, assuming your neighboring states grant permission to you for doing so. NatureServe will encourage all participating Network programs to grant this type of access to one another.
- Q: What if my agency prevents me from sharing data with NatureServe?
- A: In these cases, Explorer Pro can provide data to customers at a lower precision through the national tool, with a built-in linkage to the state-hosted tool for finer scale data to be shared directly by the program.