

www.nybg.org

Michaela Jackson Haochen Shen Navya Thakkar Betty Yang

Pratt Institute (2024)

Executive Summary

The New York Botanical Garden (NYBG) is a renowned botanical museum,

educational institution, and conservation organization located in Bronx, New York. It is celebrated for its extensive plant collections, beautiful landscapes, and significant role in botanical research, attracting visitors and researchers from around the globe.

Unmoderated Remote User Testing (URUT) was conducted with online participants to evaluate usability issues on the NYBG website. URUT allows researchers to conduct cost-effective user research in the user's natural environment through screen and voice recording software. The software used for this study was <u>UserTesting.com</u>.

This study focused on the navigability of the website for general visitation user flows, such as looking at garden hours, current exhibitions, and ticket options. Based on the evaluation, **3 usability concerns** were identified and addressed:

- 1. Recommendation #1: Improve navigation of carousel elements on the homepage
- Recommendation #2: Enhance the navigation menu's visual affordance to find submenus
- **3. Recommendation #3:** Standardize the presentation of general information regarding NYBG's hours and tickets
- 4. Recommendation #4: Collate content about ticketing for locals on the Tickets page and the Ticketing portal

This report details the methodology used, outlines and explains the user testing findings, and provides an in-depth review of the commendations mentioned above. This report aims to provide a prioritized list of recommendations for improving the usability of the NYBG website for browsing visitor information, the ticketing process, and the overall quality of the application.

Table of Contents

Executive Summary	2
Introduction	4
Methodology	5
User Group	5
Scenario	5
Tasks	5
Post-task Questions	6
Results	7
Overall Findings	7
Problems & Recommendations	8
Recommendation #1: Improve navigation of carousel elements on the	
homepage	8
Recommendation #2: Enhance the navigation menu's visual affordance	
to find submenus	10
Recommendation #3: Standardize the presentation of general information regarding NYBG's hours and tickets	12
Recommendation #4: Collate content about ticketing for locals on	
the Tickets page and the Ticketing portal	14
Conclusion	16
Appendix	17
A: User Profile & Task Data	17
B: Rainbow Sheet of Test Observations	19
References	21

Introduction

The **New York Botanical Garden** is a premier institution dedicated to plant research, conservation, and education, boasting **one of the world's largest and most diverse botanical collections**. Its website serves as a **crucial portal** for visitors to access information about visiting hours, current exhibitions, educational resources, and event ticketing. Recognizing the importance of the website in facilitating the visitor experience, this testing aimed to assess the site's effectiveness in delivering information, facilitating user interactions, and providing an overall satisfactory experience for visitors.

The **Unmoderated User** method was chosen to evaluate NYBG's desktop website. While the NYBG website is beautifully designed, user-friendly, and provides a wealth of information, conducting an URUT will provide specific issues related to the tasks assigned. A group of **twelve participants** engaged in various tasks designed to evaluate different aspects of the website's usability. This approach was particularly focused on testing the visitation and ticketing flow, a critical component for NYBG, which relies heavily on a reservation system for managing visitor entry and ensuring a smooth operational process. Analysis of these tests lead to **four critical recommendations** to improve the usability of NYBG's website. This report highlights key findings, including areas of strength and opportunities for improvement identified during the testing process.

Methodology

An **Unmoderated Remote Usability Test** is a widely implemented evaluation method used to identify usability issues in an interface. It allows participants to interact with a product or website from their environment without direct supervision or guidance from a moderator. Participants are given specific tasks to complete and provide feedback, allowing for natural user behavior to be observed and analyzed remotely through screen and voice recording software. (Gray, 2015).

An URUT was chosen because it allows researchers to conduct user research in the user's natural environment. Additionally, it is more cost and time-effective than in-person, moderated user tests. They provide qualitative and quantitative data from real users. The parameters of this method are outlined below,

The software used for the purpose of this study was <u>www.UserTesting.com</u>.

USER GROUP

Our user group is very diverse. The age range of the female and male users was 19-52. They are located around the United States, and their main language is English. Their salary ranges from \$10,000 to \$20,000+ for part-time or full-time employees. A total of 12 users were tested. For more detailed user profiles, please see Appendix A.

SCENARIO

You want to visit the New York Botanical Garden with your friend this weekend. Plan your trip to see The Orchid Show: Florals in Fashion.

TASKS

Tasks were designed using recommendations from Schade (2019).

- 1. You want to know when the NYBG is open.
- 2. Look for more information about the current exhibitions at the NYBG.
- 3. Look at how to buy tickets for The Orchid Show: Florals in Fashion on Friday, March 8th, 2024.
- 4. You find that you are going to be visiting the NYBG a lot this year. Find a way to access a discount for your tickets.



POST-TASK QUESTIONS

- 1. What frustrated you most about this site?
- 2. If you had a magic wand, how would you improve this site?
- 3. What did you like about the site?
- 4. How likely are you to recommend this site to a friend or colleague (0=Not at all likely, and 10=Very likely)?

Results

OVERALL FINDINGS

Based on the user observations, a **total of eighteen issues** were identified with the usability and functionality of the NYBG website. Overall, users have expressed a need for more precise labeling, intuitive navigation, and enhanced functionality. The main areas of confusion for users were navigating the main menu, the ticketing portal, and the tickets and hours page. For a full list of the data collected, please see Appendix B.

Users appreciated the informative and easily accessible homepage. However, they had difficulties navigating the website using the main menu. They often missed subtle indicators like navigation arrows and found the navigation menu labels confusing. For instance, the "What's On" label was not immediately associated with current exhibitions, leading to confusion.

Despite efforts to provide comprehensive information, some users found that the exhibition and event pages needed more visual content and wanted more photos. The filters on the "What's On" page were noted to be somewhat hidden, impacting their discoverability. Users also faced difficulties navigating the ticketing portal, including the inability to rectify errors and the absence of modern website standards. They emphasized the importance of more precise labeling and easier access to discounts, particularly for memberships. Furthermore, users expected our operating hours to be prominently displayed at the bottom of the visit page, following industry standards.

Below, we describe the main areas of confusion for users in more detail and outline four recommendations:

- 1. Recommendation #1: Improve navigation of carousel elements on the homepage
- Recommendation #2: Enhance the navigation menu's visual affordance to find submenus
- **3. Recommendation #3:** Standardize the presentation of general information regarding NYBG's hours and tickets
- 4. Recommendation #4: Collate content about ticketing for locals on the Tickets page and the Ticketing portal

PROBLEMS & RECOMMENDATIONS

RECOMMENDATION #1: Improve navigation of carousel elements on the homepage

THE PROBLEM

The garden's homepage features a carousel with images and descriptions of current events and exhibitions as well as a calendar with events. Users are encouraged to navigate the slides using the designated arrows to access information within the carousel. However, users have highlighted a usability concern regarding the need for an indicator specifying the carousel's current slide. This lack of clarity compels users to navigate the carousel without knowing when it concludes. Such ambiguity could result in users overlooking valuable information within the carousel due to the unawareness of additional content.



The carousel element is an effective way to showcase both upcoming and ongoing events in the garden. To improve the user experience, including **navigation dots** at the bottom of each slide is recommended. These dots will act as indicators, allowing users to track their progress within the carousel and show which slide is currently being displayed. This addition will enable users to assess the amount of content viewed and give them a clear idea of the remaining content in the carousel. This feature will likely motivate users to explore all the presented information, leading to a more **engaging and oriented interaction with the carousel.**



NYBG

RECOMMENDATION #2: Enhance the navigation menu's visual affordance to find submenus

THE PROBLEM

The website has a primary navigation bar that offers a submenu of more specific navigation options. To indicate this added functionality, right-facing arrows are strategically positioned beside the right margin of the main menu options. However, **5/12** users overlooked the submenu because they didn't notice the arrows highlighted separately from the main menu. As a result, they clicked on the main menu instead of the submenu, only to realize later that the submenu was available. User #4 expressed surprise when they encountered this issue, saying, "I didn't notice those arrows before."

Additionally, the main menu and arrows are clickable as separate entities, so users must click on the arrow to access the submenu options. This increases the likelihood of users overlooking the arrow and missing out on the submenu.



The website's main menu and submenu provide users with a wide range of helpful navigation options to ensure a seamless browsing experience. Small additions to the menu will help refine the user experience and address the observed challenge of users initially overlooking the submenu. Streamline user interaction by ensuring that both the right-facing arrows and main menu navigation items are collectively highlighted upon hovering and function as a cohesive, clickable entity. This implies that users can access the submenu by clicking either on the main menu itself or the arrows, eliminating the need for specific clicks on the arrows.

Additionally, elevating the visibility of the arrows by introducing a distinctive color when highlighted. This visual refinement draws attention to the arrows, making them more conspicuous and reinforcing their role as indicators of the submenu's presence. The introduction of a different color facilitates prompt recognition of the submenu indicator. The combined effect of unified clickability and heightened visual affordance contributes to a smoother user journey, ensuring users promptly identify and explore the comprehensive navigation options embedded within the main menu and submenu.



Adding a different color to the arrows when hovering over a menu option will increase their prominence and help identify the submenu indicator.





RECOMMENDATION #3: Standardize the presentation of general information regarding NYBG's hours and tickets

THE PROBLEM

The content about hours and ticketing are important elements of the NYBG website. We found that participants frequently overlooked details regarding NYBG's operating hours and the ticketing process. Key issues included the absence of operating hours on the homepage during closure periods, the non-appearance of hours in the website's footer, and unclear wording related to opening times.

Additionally, users anticipate that the "Tickets" call-to-action (CTA) on the Orchid Show page will directly link to the Orchid Show's ticket portal, yet it redirects to a general Tickets page, adding an unnecessary step. Furthermore, the "Tickets" CTA on the Tickets page is often overlooked.



Many users mentioned that the website was user-friendly, and information about ticketing and garden hours was mostly easy to find. We think a few tweaks to the presentation of this information will aid in navigability and further understanding of it.

IEW YORK OTANICAL	LOCATION Learn 2900 Southern Blvd On <u>About</u> Bronx, NY 10458-5124 8 Shop How To Get Here Science	GENERAL INFO SOCIAL Call: <u>718.817.8700</u> Instagram Contact Us Facebook Privacy.Policy X Terms.&Conditions YouTube Jobs IikTok	HOURS Monday Closed Tuesday 10:00 Wednesday 10:00 Friday 10:00 Saturday 10:00 Sunday 10:00	j am - 6:00 pm am - 6:00 pm am - 6:00 pm am - 6:00 pm am - 6:00 pm - 6:00 pm
■Menu Search	NYBG	Tickets	embership Support	
Plant Science	What's Beautiful Now	Ask A Plant Expert	Mertz Libra	Modify "Hou
About NYBG The New York Botanical Garden is a museum of plant a center for learning, and a plant science leader in the Learn More Plan Your Visit	Location s, 2900 Southern Blvd., Bronx, New York 10458 Brons. Get Directions	Hours Monday Closed Tuesday 10:00 am - 6:00 pm Wednesday 10:00 am - 6:00 pm Friday 10:00 am - 6:00 pm Saturday 10:00 am - 6:00 pm Saturday 10:00 am - 6:00 pm Saturday 10:00 am - 6:00 pm		to be more comprehens + add Hours footer



TICKETS & HOURS											
VISIT Tickets & Hours How to Get Here Dining	Visiting the Garden? You'll need a ticket—whether it's your first time here, or you're reserving as a Member, Patron, or Corporate Member. Learn more about ticket pricing and scheduling below, and how to purchase your tickets online or at one of our ticketing windows. Have a question or need help with your order? Contact us at <u>718.817.8716</u> , 10 a.m.–6 p.m., or reach out to <u>ticketingsupport@nybg.org</u> and we'll be happy to assist!										
	Change wording on CTA to help users										

follow the ticketing user flow



RECOMMENDATION #4: Collate content about ticketing for locals on the Tickets page and the Ticketing portal

THE PROBLEM

When performing an unmoderated remote user test, one of our tasks asked users to find appropriate discounts for their visits to the NYBG. NYBG offers many wonderful **discounts** specific to students, NYC residents, and Bronx locals, as well as memberships available to all users. Since our user group consisted of New York residents, it was our hope that we could test the features of the website that offered this information.

7 out of 12 local users expressed frustration with the process of finding discounts due to the multiple clicks it required. Additionally, **6 out of these 7** found that the ticketing information and discounts pertaining to locals (NYC residents, Bronx locals) **were very hard to find,** and the labels used were confusing.



To increase the visibility of discounts and deals available to locals, we propose that the Tickets page have a prominent section **dedicated to explaining the different types of passes** and the **different types of discounts for locals**. In addition, we propose that the ticketing portal have a separate tab labeled **Tickets for Locals** that describes the different tickets available for locals, their requirements, and how to buy/reserve tickets.

Collating this information in these two places will allow local users to easily understand what ticketing options are available to them, encouraging visitation to the NYBG.



other visitors in one area on the website

Conclusion

As a distinguished institution dedicated to plant research, conservation, and education, NYBG holds global significance, attracting a diverse audience of visitors and researchers. This user testing initiative sought to elevate the digital experience for visitors, ensuring a seamless and enjoyable online journey, particularly when exploring and purchasing exhibition tickets. The findings identified **four crucial areas** for enhancement, including search functionality, category pages, and other aspects that collectively contribute to a more refined NYBG digital experience:

- 1. Recommendation #1: Improve navigation of carousel elements on the homepage
- Recommendation #2: Enhance the navigation menu's visual affordance to find submenus
- **3. Recommendation #3:** Standardize the presentation of general information regarding NYBG's hours and tickets
- 4. Recommendation #4: Collate content about ticketing for locals on the Tickets page and the Ticketing portal

The evaluation highlighted overarching areas of improvement and explored specific user challenges. From the lack of a clear indicator in the homepage slideshow to users missing essential information about operating hours and ticketing flow, each observation contributes to the comprehensive goal of optimizing the digital platform. The diverse user group, spanning different age ranges, locations, and employment statuses, ensures that recommendations are inclusive, addressing the varied needs of NYBG's global audience.

The proposed solutions aim to enhance user engagement and satisfaction by improving the visual affordance of navigation elements, refining wording for clarity, and introducing dedicated sections for local discounts and ticketing information.

In conclusion, this unmoderated remote user testing initiative guides NYBG toward a more user-centric and effective digital presence. The proposed solutions, grounded in user feedback and behavioral insights, have the potential to transform NYBG's digital landscape, making it more accessible, engaging, and accommodating for visitors worldwide. As NYBG continues to thrive as a living museum and conservation organization, these insights pave the way for a digital journey that mirrors the excellence and richness of the botanical wonders it houses.

NYBG

Appendix

A: USER PROFILE & TASK DATA

Table of user profiles from the participants in our Unmoderated Remote User Test and users' frustrations and recommendations for the NYBG website.

User	Age	Gender	Income	Test Duration	Frustrations with Website	Recommendations for Website
1	52	Female	\$150,000 - \$174,999	5:38	N/A	I would make locals specific discounts/incentives more easy to find
2	47	Male	\$175,000 - \$199,999	10:29	Lack of photos	More photos per page
3	45	Female	\$150,000 - \$174,999	8:56	The site has some components that are not logical. so it doesn't flow as smoothly as it could	I would make all components of the site flow and seem obvious.
4	35	Male	\$200,000 +	6:21	N/A	Getting information in fewer clicks. However I was able to get all the information I needed
5	39	Male	\$200,000 +	5:37	N/A	I don't believe the website needs improving. I have used this site in the past with no issue
6	26	Female	\$125,000 - \$149,999	8:21	The front page isn't really clear about opening hours and days. It didn't list the hours NYBG is open. I had to go to the Visit page to learn more	Improve how the hours are listed in the home page. Otherwise everything else was pretty clear and the website is appealing and trustworthy looking

7	19	Male	Less than \$19,999	3:34	N/A	Make the ticket purchase system look more modern and built into the website not just a pop up
8	41	Female	\$100,000 - \$124,999	8:34	Having to go into the ticket section all the way to see the options for shows	Fewer clicks to see prices and shows that are options, and membership prices clearly shown when you first get to the membership page
9	34	Female	\$125,000 - \$149,999	4:28	The fact they didn't save the date I was trying to buy tickets for when I clicked through the calendar	I would have it save my date and event preferences and let me buy tickets through the calendar
10	45	Male	\$100,000 - \$124,999	8:17	I wanted to see membership prices for each show, and I did not see clearly what the discount would be, only that there would be a discount	Clear information about member discounts
11	46	Male	\$175,000 - \$199,999	11:40	Membership descriptions are not available from the purchase page, had to look for it	Better description of discounts and memberships
12	35	Male	\$200,000 +	8:13	When I clicked on tickets at the orchid show. It took me to the general page instead of directly being able to purchase tickets to the show	Once you click on tickets for the orchid show, it should link you directly to where to buy instead of another ticket page

B: RAINBOW SHEET OF TEST OBSERVATIONS

Table that shows a list of observations and issues that users encountered during the Unmoderated Remote User Test. Color coordinated using the Rainbow Sheet method to identify which of the 12 users encountered each of the 18 issues documented.

		U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12
No.													
	Navigation & Labeling												
1	Users did not need to use the menu bar at all & found all information on homepage												
2	Users did not realize there were submenus for the main menu items (missed the arrows on navigation bar)												
3	User's don't recognize the label "What's On" as current exhibitions												
	General Information for NYBG												
4	When trying to find hours on the visit page, users scroll to the bottom of visit page expecting them to appear at the bottom of the page (industry standard)												
5	Hours on Homepage unclear												
	Exhibitions & Events												
6	User indicated that more photos on each exhibition & events page would help a lot												
7	The filters on What's On page were hidden too well												
8	Scrolling through Exhibition and Events on Homepage and did not realize they were looping												

9	The Orchid Show description was unclear for users						
	Tickets Page & Ticketing						
10	Unclear if locals discount applies to the show						
11	Locals discounts hard to find on website						
12	Ticket links from exhibition and event specific pages are expected to lead directly to ticketing portal instead of Tickets page						
13	Bronx Pass in Ticketing Portal - once you add a zip code, you cannot change it so not easy to rectify errors without exiting portal						
14	Confusing information/labeling about grounds access pass vs. exhibition passes						
15	Found it hard to find how to buy tickets on front Tickets page - Tickets CTA not noticeable						
16	Users were unable to find membership discounts						
17	Ticketing portal was old and not standardized to modern websites						
18	Expressed need for option to save dates and other preferences when buying tickets						

References

Gray, C. (2015). How to Run an Unmoderated Remote Usability Test. Retrieved from: <u>http://uxmastery.com/how-to-run-an-unmoderated-remote-usability-test-urut/</u>

Schade, A. (2019, October 7). Write Better Qualitative Usability Tasks: Top 10 Mistakes to Avoid. Nielsen Norman Group. <u>https://www.nngroup.com/articles/better-usability-tasks/</u>