

Accessibility Evaluation Report:

# Portland Press

April 30, 2026

**Conducted by:** Accessiblü, LLC

**For:** Library Accessibility Alliance (LAA)

**Prepared by:**

Accessiblü, LLC

882 Pompton Ave, STE A-2

Cedar Grove, NJ 07009

[hey@accessiblu.com](mailto:hey@accessiblu.com)

**Primary Contact:**

Jeff Rodgers, MS Ed

Director of Digital Accessibility

Accessiblü

[jeff@accessiblu.com](mailto:jeff@accessiblu.com)

## Table of Contents

<b>SUMMARY OF ACCESSIBILITY FINDINGS.....</b>	<b>3</b>
KEY FINDINGS .....	4
<i>Top 3 Issues Identified.....</i>	5
DISABILITIES IMPACTED.....	6
<b>PAGE-SPECIFIC FINDINGS AND IMPACT ANALYSIS .....</b>	<b>8</b>
PORTLAND PRESS HOME PAGE .....	8
<i>Home Page Screenshot .....</i>	10
SEARCH RESULTS PAGE.....	11
<i>Search Results Page Screenshot.....</i>	13
ARTICLE PAGE: PHOTOSYNTHESIS: LIGHT AND LIFE (THE BIOCHEMIST) .....	14
<i>Article Page Screenshot.....</i>	16
ADVANCED SEARCH PAGE .....	17
<i>Advanced Search Page Screenshot .....</i>	19
<b>CODE RECOMMENDATIONS AND TECHNICAL GUIDANCE .....</b>	<b>20</b>
1. <i>Add an H1 Page Heading to the Home Page .....</i>	20
2. <i>Restore the WeChat QR Code to the Accessibility Tree.....</i>	20
3. <i>Correct the Filter Toggle Role and State .....</i>	21
4. <i>Label the YouTube Iframe .....</i>	22
5. <i>Update Primary Action Color to Meet Contrast Requirements.....</i>	22
<b>FINAL THOUGHTS AND RECOMMENDATIONS .....</b>	<b>23</b>
RECOMMENDED FIXES BY PRIORITY.....	24
<b>DISCLAIMER .....</b>	<b>25</b>

## Summary of Accessibility Findings

Accessiblü conducted a high-level accessibility evaluation of the Portland Press platform, a scholarly publishing platform operated by Portland Press Ltd. on behalf of the Biochemical Society, to assess its usability for individuals with disabilities. Portland Press publishes journals including the Biochemical Journal, The Biochemist, and several other life sciences titles. The review was conducted using the JAWS 2025 screen reader on Windows 11 with Google Chrome, keyboard-only navigation, and manual inspection, supplemented by automated scanning with axe DevTools, for conformance with select WCAG 2.2 AA success criteria.

The evaluation covered four key page types: the Portland Press home page, a keyword search results page, an individual article page (Photosynthesis: Light and Life, published in The Biochemist), and the Advanced Search page.

Portland Press has deployed an accessibility overlay, which was present on all tested pages but was not activated during this evaluation. Accessibility overlays are third-party tools that attempt to apply automated fixes to a website's accessibility issues at the browser level. While overlays are sometimes marketed as a path to WCAG conformance, the accessibility community has extensively documented that they do not reliably improve accessibility and frequently introduce new barriers for users of assistive technology. Screen readers in particular can be disrupted by overlay scripts that inject dynamic content, alter focus behavior, or modify the DOM in ways that conflict with how AT software reads a page. For this reason, Accessiblü's standard practice is to evaluate platforms in their native state without overlay activation. The findings in this report reflect the underlying accessibility of the Portland Press platform itself.

Portland Press does demonstrate a number of thoughtful accessibility practices that do provide a solid structural foundation. Landmark regions are consistently and correctly implemented across all tested pages, including banner, primary navigation, main, contentinfo, cookie consent, and search regions. The main navigation menus (Journals, Other Publications, Collections, Authors, Policy) correctly announce expanded and collapsed states when activated by keyboard. The Institutional Accounts dropdown, used for library proxy access, correctly communicates its expanded and collapsed state to screen reader users. These structural choices reflect meaningful attention to the needs of assistive technology users.

That said, the evaluation identified several opportunity areas across all four pages that may create friction for users relying on screen readers, keyboard navigation, and other assistive technologies. The most consistent pattern involves insufficient color contrast across primary action elements, heading structure anomalies that affect page orientation for screen reader users, and interactive controls that either lack appropriate accessible names or are coded with incorrect roles. Addressing these areas — through changes to the underlying platform code rather than reliance on an overlay — would meaningfully improve the experience for researchers, students, and library patrons who rely on assistive technologies to access Portland Press content.

## Key Findings

Across all four pages, the most significant opportunity areas center on three recurring patterns. First, the platform's primary color for interactive elements, links, and action buttons (#008ab7, a medium teal/blue) does not meet the 4.5:1 contrast ratio required for normal text against white backgrounds, yielding approximately 3.94:1. This affects search buttons, article action links, "Find Out More" calls to action, and content links throughout the platform. Second, heading hierarchies are inconsistent across the home page and article pages, leaving screen reader users without a reliable page structure to navigate by. Third, several interactive controls, including the filter toggle on the Advanced Search page, the article toolbar icons, and some navigational links, are either coded with incorrect roles or lack the programmatic state information assistive technologies need.

These issues, while addressable, do create meaningful friction for users with disabilities. A researcher using JAWS to locate and access a specific article would encounter multiple barriers in the search and retrieval workflow, from misidentified control roles on the Advanced Search page to unlabeled graphic links and incorrect heading structure on the article page itself. Resolving the core contrast, heading, and role/name patterns would improve accessibility across the entire platform rather than requiring page-by-page fixes.

## Top 3 Issues Identified

### 1. Insufficient Color Contrast on Interactive Elements and Links

- a. **Description:** The platform's primary action color (#008ab7 on white #ffffff) produces a contrast ratio of approximately 3.94:1 for most links, buttons, and action elements. The minimum required ratio for normal text is 4.5:1. This affects Search buttons across all pages, article action links (Abstract, View Article, PDF), "Find Out More" links on the home page, and the Bluesky follow link in the footer (#cf4520 on #f5f5f5 = 4.25:1). The PDF button label on the article page adds a second contrast issue, with white text on the same #008ab7 background.
- b. **Impact:** Users with low vision who rely on color differentiation may have difficulty reading these elements. The issue extends beyond aesthetics; interactive elements that cannot be visually distinguished create barriers for low-vision users who do not use a screen reader.
- c. **WCAG Success Criteria:** 1.4.3 Contrast (Minimum) (AA)

### 2. Missing H1 and Heading Hierarchy Inconsistencies

- a. **Description:** The Portland Press home page contains no H1 heading. The first heading encountered by JAWS is "Your Science, Your Publisher" at Heading Level 2, followed by additional H2 and H3 headings, but no H1 to anchor the page for screen reader users. On the article page, the article title is correctly coded as H1, but the sidebar headings ("Cited By" and "Get Email Alerts") are coded as H3, skipping H2 entirely.
- a. **Impact:** Screen reader users who navigate by heading to orient themselves to a page will find no H1 on the home page, making it difficult to establish page context or confirm they have landed in the right place. On the article page, the skipped heading level creates structural confusion for users navigating by heading level.
- b. **WCAG Success Criteria:** 1.3.1 Info and Relationships (A)

### 3. Filter and Interactive Controls Coded with Incorrect Roles

- a. **Description:** Across the search results and advanced search pages, several interactive controls are assigned incorrect semantic roles. The Filter expand/collapse toggle on the Advanced Search page is coded as an anchor link rather than a button and does not announce its expanded or collapsed state. On the search results page, the date range "Apply" control is similarly announced as a link. Radio buttons for search scope ("All" and "Exact Phrase") are announced as checkboxes rather than radio

buttons.

- b. **Impact:** Screen reader users who navigate by element type (buttons, links, form controls) receive incorrect information about what these controls do and how to interact with them. Users who expect a button to behave like a button, or a radio group to behave like a radio group, may not discover the correct interaction pattern or may activate the wrong control.
- c. **WCAG Success Criteria:** 4.1.2 Name, Role, Value (A)

## Disabilities Impacted

### Blind and Low-Vision Users

**Issues:** Screen reader users encounter a missing H1 on the home page, causing disorientation on page load. The phantom “Skip nav destination” link, which is accessible by arrow key but not Tab, adds noise to the reading flow. A WeChat QR code image in the home page footer is hidden from assistive technology entirely, leaving screen reader users without access to this contact channel. On the article page, multiple navigation and action links lack accessible names (issue cover link, All Issues link, share icon graphic, copyright icon). The article’s DOI link uses the raw URL as its accessible name rather than a meaningful label.

**Impact:** Low-vision users who cannot meet the platform’s primary blue contrast ratio may struggle to identify actionable elements. Blind users face meaningful barriers on the article page, where several links in the action toolbar and sidebar are effectively unlabeled, requiring trial-and-error navigation.

### Users with Motor Disabilities

**Issues:** Keyboard-only users on the Advanced Search page find that the term search and author search input fields are only reachable via Tab, not by arrow key or scroll navigation. The citation combo box grouping announces all citation fields (journal, year, volume, issue, first page) as a single contiguous block when using arrow keys, making individual fields difficult to target without Tab navigation.

**Impact:** Users with motor disabilities who rely on keyboard navigation may find the Advanced Search page’s citation search form particularly time-consuming, as Tab-only field access increases the number of keystrokes required to navigate between form sections.

## Neurodiverse Users

**Issues:** The absence of a page-level H1 on the home page, combined with heading levels that begin at H2, reduces the clarity of page structure for users who rely on predictable document hierarchy. On the search results page, the date picker presents all dates as “selected” regardless of actual selection state, providing no reliable feedback for users who depend on accurate status information to make decisions.

**Impact:** Cognitive accessibility benefits significantly from consistent, predictable structure. Resolving heading hierarchy and providing accurate status information for interactive controls would reduce cognitive load for users with attention or processing differences.

## Users with Hearing Impairments

**Issues:** No specific audio content barriers were identified on the tested pages. Portland Press does not embed auto-playing video or audio on the home or search pages. The YouTube video embedded on the home page follows standard YouTube embed practices and is announced appropriately.

**Impact:** No significant barriers were identified for users with hearing impairments on the evaluated pages.

# Page-Specific Findings and Impact Analysis

## Portland Press Home Page

URL: <https://portlandpress-com.offcampus.lib.washington.edu/>

Opportunity Area	WCAG Success Criteria	Description	Example
<b>Missing H1 Page Heading</b>	1.3.1 Info and Relationships (A)	The home page contains no H1 heading. The first heading JAWS encounters is "Your Science, Your Publisher" coded as H2. Without an H1, screen reader users have no page-level anchor for heading navigation and cannot confirm the primary topic of the page from the heading structure alone.	JAWS announces "Your Science, Your Publisher Heading Level 2" as the first heading on the page. The auditor confirmed: No identified H1 heading level 1 on this page.
<b>QR Code Image Hidden from Screen Readers</b>	1.1.1 Non-text Content (A)	The WeChat QR code image in the home page footer is hidden from assistive technology. While the surrounding text instructs users to "use the QR code below," the QR code image itself is not exposed to screen readers, leaving blind users without access to the content it conveys.	JAWS reads "Use the QR code below and find us on WeChat" but the auditor confirmed the QR code image is hidden from the screen reader. The auditor noted it's not decorative and is very important.
<b>Phantom Link in Main Content Region</b>	2.4.3 Focus Order (AA)	An empty-href anchor link reading "Skip nav destination" is present in the main content region and is reachable by arrow key navigation but not by Tab. This creates an unexpected element in the reading order that does not appear in the tab sequence, causing confusion for screen reader users navigating with arrow keys.	The auditor confirmed: This can only detect by arrowing down. When tabbing, it's not there. The team noted it appears to be an empty href that was likely meant to be removed.
<b>YouTube Iframe Missing Accessible Name</b>	4.1.2 Name, Role, Value (A)	The YouTube video iframe embedded on the home page does not have an accessible title, aria-label, or aria-labelledby attribute. Screen reader users encounter the iframe without a label that describes the content of the embedded video.	Axe DevTools: frame-title critical violation on iframe[width="418"]. Source code: <iframe width="418" height="245" src="https://www.youtube.com/embed/..." frameborder="0"> with no title attribute.

Opportunity Area	WCAG Success Criteria	Description	Example
<b>Insufficient Color Contrast on Action Links</b>	1.4.3 Contrast (Minimum) (AA)	Multiple "Find Out More" action links and the Bluesky follow link use colors that do not meet the 4.5:1 contrast ratio minimum. "Find Out More" links use foreground #008ab7 on background #ffffff (3.94:1). The Bluesky link uses foreground #cf4520 on background #f5f5f5 (4.25:1).	Axe DevTools: color-contrast violations on <a>FIND OUT MORE</a> elements. Foreground #008ab7, background #ffffff, ratio 3.94:1. Bluesky link: foreground #cf4520, background #f5f5f5, ratio 4.25:1. Required ratio: 4.5:1.

**Impact Summary**

Screen reader users navigating the Portland Press home page by heading will find no H1 to anchor the page, and the first heading they encounter does not clearly identify the platform or its purpose. Users following footer instructions to connect via WeChat QR code will find the QR code inaccessible from a screen reader. Low-vision users who rely on visual contrast to distinguish interactive elements from body text may have difficulty identifying "Find Out More" action links throughout the home page sections. Adding an H1 heading, restoring the QR code to the accessibility tree with descriptive alt text, resolving the phantom empty link, labeling the YouTube iframe, and adjusting the primary action link color to meet the 4.5:1 minimum would collectively address the most impactful barriers on this page.

## Home Page Screenshot

**PORTLAND PRESS**

Search... All Content  Advanced Search

Register Institutional Accounts  Sign

JOURNALS  OTHER PUBLICATIONS  COLLECTIONS  AUTHORS  LIBRARIANS AND READERS  TRANSITION TO OPEN  POLICY

**PORTLAND PRESS**

Your science. Your publisher.

Submit your work

This site uses cookies. By continuing to use our website, you are agreeing to [our privacy policy.](#) **Accept**

Figure 1: Portland Press home page showing site header, hero panel, and promotional content sections.

## Search Results Page

URL: <https://portlandpress-com.offcampus.lib.washington.edu/search-results?page=1&q=photosynthesis>

Opportunity Area	WCAG Success Criteria	Description	Example
<b>Date Picker Grid Announces All Dates as Selected</b>	1.3.3 Sensory Characteristics (A)   4.1.2 Name, Role, Value (A)	The date range filter on the search results page uses a calendar grid where every date is announced as "selected" by JAWS regardless of actual selection state. Screen reader users cannot distinguish the selected date from unselected dates, making granular date selection effectively inaccessible.	JAWS announced: "Thursday, April 30th, 2020 selected" and "Thursday, May 7th, 2026 selected" for different dates. The auditor confirmed: Everything is announced as selected. The screen reader user cannot determine which date is selected
<b>Filter Apply Control Announced as Link</b>	4.1.2 Name, Role, Value (A)	The "Apply" control within the date filter group is coded as a link rather than a button. This causes JAWS to announce it as a link, which does not communicate the function of applying a filter selection. Controls that perform in-page actions should be coded as buttons.	JAWS announced the Apply control as a link. The auditor confirmed: Axe DevTools: aria-role-missing on filter Apply element.
<b>Search Result Article Links Use Full URL as Accessible Name</b>	2.4.6 Headings and Labels (AA)	Article links in the search results use a self-referencing aria-labelledby pattern that reads the full URL path as the link's accessible name. Screen reader users hear the complete URL path rather than a meaningful article title or descriptive label.	JAWS read a full URL path aloud for a search result article link. This confirmed a lack of accessible name for the link.
<b>Insufficient Color Contrast on Search Action Buttons</b>	1.4.3 Contrast (Minimum) (AA)	The "Add Term" and "Update" buttons in the search refinement area use white text (#ffffff) on the platform's primary blue background (#008ab7), producing a contrast ratio of approximately 3.94:1. This falls below the 4.5:1 minimum required for normal text.	Axe DevTools: color-contrast violation on <input type="button" value="Add Term"> and <input id="queryBuilderSubmit" value="Update">. Foreground #ffffff, background #008ab7, ratio 3.94:1.
<b>Insufficient Color Contrast on Article Action Links</b>	1.4.3 Contrast (Minimum) (AA)	Article-level action links (Abstract, View Article links in search result cards) use foreground color #008ab7 on white background #ffffff, producing a	Axe DevTools: multiple color-contrast violations on viewArticleLink and showAbstractLink elements across all

Opportunity Area	WCAG Success Criteria	Description	Example
		contrast ratio of 3.94:1 across all result cards on the page.	search result cards. Foreground #008ab7, background #ffffff, ratio 3.94:1. Required: 4.5:1.

**Impact Summary**

The search results page presents meaningful barriers at two points in the search workflow: date-based filtering and result navigation. A screen reader user attempting to filter results by publication date cannot determine which date is selected because the calendar grid announces all dates as selected. Users attempting to navigate directly to an article from search results hear full URL paths rather than meaningful article titles as link labels. Resolving the date picker state announcements, correcting the role of the Apply control, providing meaningful accessible names for article links, and updating the primary action color to meet contrast requirements would make the search results page substantially more accessible for all user groups relying on assistive technology.

Search Results Page Screenshot

The screenshot shows the Portland Press website's search results page. At the top left is the Portland Press logo. A search bar contains the text 'photosynthesis'. To the right of the search bar are links for 'All Content', 'Advanced Search', a shopping cart icon, 'Register', 'Institutional Accounts', and a 'Sign' button with a user icon. Below the search bar is a navigation menu with links for 'JOURNALS', 'OTHER PUBLICATIONS', 'COLLECTIONS', 'AUTHORS', 'LIBRARIANS AND READERS', 'TRANSITION TO OPEN', and 'POLICY'. The main content area is titled 'Update Search' and shows '1-50 of 62' results. The search term 'photosynthesis' is entered in a text box, with 'Filter' and 'ADD TERM' and 'UPDATE' buttons below it. On the left, there are filter sections for 'FORMAT' (Articles, 62), 'JOURNAL' (The Biochemist, 62), and 'ARTICLE TYPE' (Feature, 62). The main results area shows 'Search Results for photosynthesis' with filters for 'The Biochemist' and 'Feature'. A 'Save search' button and a 'Sort by Relevancy' dropdown are also present. The first result is an article titled 'How ultrafast X-ray pulses can reveal hidden secrets of photosynthesis' by Uwe Bergmann, Vittal Yachandra, and Junko Yano, published in *The Biochemist* (2019) 41 (2): 24-29. Below the article title are buttons for 'Abstract', 'View article', and 'PDF'.

Figure 2: Portland Press search results page for the query "photosynthesis" with The Biochemist journal and Feature article type filters applied, showing 62 results.

## Article Page: Photosynthesis: Light and Life (The Biochemist)

URL: <https://portlandpress-com.offcampus.lib.washington.edu/biochemist/article/35/5/4/754/Photosynthesis-Light-and-Life>

Opportunity Area	WCAG Success Criteria	Description	Example
<b>Author Name Link Not Distinguishable from Surrounding Text</b>	1.4.1 Use of Color (A)	The author name link (James W. Murray) on the article page is not visually distinguishable from the surrounding body text through any means other than color. No underline or other non-color visual indicator differentiates the link from non-link text.	Axe DevTools: link-in-text-block serious violation on <code>&lt;a rel="nofollow" class="linked-name"&gt;James W. Murray&lt;/a&gt;</code> . The element's contrast ratio with surrounding text could not be determined due to element overlap, flagged as a serious issue.
<b>Sidebar Heading Hierarchy Skips Level</b>	1.3.1 Info and Relationships (A)	On the article page, the article title is correctly coded as H1. However, the sidebar headings "Cited By" and "Get Email Alerts" are coded as H3, skipping H2 entirely. This creates a gap in the heading hierarchy that can be disorienting for screen reader users navigating by heading level.	JAWS announces: "Photosynthesis: Light and Life Available Available. Heading Level 1" then "Cited by Heading Level 3" and "Get Email Alerts Heading Level 3" with no H2 in between. Axe DevTools: heading-order moderate violation on <code>&lt;h3 class="article-cited-title"&gt;Cited By&lt;/h3&gt;</code> .
<b>Multiple Article Action Links Lack Accessible Names</b>	4.1.2 Name, Role, Value (A)	Several links in the article sidebar and action toolbar lack appropriate accessible names. The issue cover image link, the All Issues link, the CrossMark widget link, and the Author and Article Information expand link all have missing or insufficient accessible names as identified by axe DevTools manual review.	Axe DevTools: aria-name-missing-incorrect critical violations on: volume/issue image link <code>&lt;a href="/biochemist/issue/35/5"&gt;</code> , All Issues link <code>&lt;a href="/biochemist/issue/browse-by-year"&gt;</code> , CrossMark widget link <code>&lt;a href="javascript:;"&gt;</code> , and Author and Article Information expand link <code>&lt;a href="javascript:;"&gt;</code> .
<b>Share Icon and Copyright Icon Graphics Exposed Without Names</b>	4.1.2 Name, Role, Value (A)	The article toolbar contains a share icon graphic link and a copyright icon link that are exposed to screen readers without accessible names. JAWS announces "share icon" for the graphic and	JAWS announced, "Link share icon" and "Link share" as two separate elements for what should be a single labeled control.

Opportunity Area	WCAG Success Criteria	Description	Example
		reads a separate unlabeled link for the copyright icon, creating redundant and unclear announcements in the toolbar.	The copyright icon was announced as an unlabeled link. The auditor confirmed the icon graphic should be hidden from the screen reader.
<b>Insufficient Color Contrast on PDF Action Elements</b>	1.4.3 Contrast (Minimum) (AA)	The PDF label text in the article action bar uses foreground #828282 on background #f5f5f5, producing a ratio of 3.52:1. The primary PDF download button uses white (#ffffff) on #008ab7, producing 3.94:1. Both fall below the 4.5:1 minimum for normal text at that weight.	Axe DevTools: color-contrast violation on <span>PDF</span> in item-pdf (foreground #828282, background #f5f5f5, ratio 3.52:1) and on .PdfOnlyLink > al-link.pdf (foreground #ffffff, background #008ab7, ratio 3.94:1).

**Impact Summary**

The article page is where researchers engage most directly with Portland Press content, and it presents several opportunity areas that could meaningfully affect screen reader usability. The unlabeled links in the sidebar and action toolbar require users to activate controls to discover their function. The skipped heading hierarchy in the sidebar makes structural navigation less predictable. The author name link, indistinguishable from body text without color, creates a barrier for low-vision users who may not perceive color differences. Providing descriptive accessible names for all links and icons, correcting the heading hierarchy, adding a non-color indicator for in-text links, and addressing PDF button contrast would bring this page into closer alignment with WCAG 2.2 AA requirements.

Article Page Screenshot

The screenshot shows the article page for "Photosynthesis: Light and Life" in The Biochemist, Volume 35, Issue 5, October 2013. The page features a dark blue header with the Portland Press logo, a search bar, and navigation links. The main content area includes the article title, author name (James W. Murray), a "Check for updates" button, and a "View Metrics" link. A "Cited By" sidebar lists Google Scholar and CrossRef. Another sidebar offers "Get Email Alerts" for Article Activity. An action toolbar contains buttons for Split-Screen, PDF, Share, Cite, and Get Permissions. The article abstract begins with "Complex life on Earth requires oxygen as the terminal electron acceptor in the respiratory chain. However, the lifetime of a single oxygen molecule in the atmosphere is only 4500 years. Oxygen is continually being replenished by the action of photosynthetic organisms, using the only substantial energy input to the Earth, sunlight: How this light energy is harvested and..." A cookie consent banner is visible at the bottom of the page.

Figure 3: Portland Press article page for "Photosynthesis: Light and Life" (The Biochemist, Vol. 35, Issue 5) showing article metadata, action toolbar, and sidebars.

## Advanced Search Page

URL: <https://portlandpress-com.offcampus.lib.washington.edu/advanced-search>

Opportunity Area	WCAG Success Criteria	Description	Example
<b>Search Input Fields Not Reachable by Arrow Key</b>	2.1.1 Keyboard (A)	The term search and author search input fields on the Advanced Search page are only reachable via Tab key navigation. Arrow key and scroll-based navigation bypasses these fields, announcing them as static text (with placeholder text) rather than as interactive form inputs. This creates an inconsistent and potentially confusing navigation experience.	JAWS announced the search field as static text when navigating by arrow key. Testing confirmed the search field is not being picked up by the screen reader as being interactive and only as static text. There is also a lack of visible label.
<b>Search Scope Radio Buttons Announced as Checkboxes</b>	1.3.1 Info and Relationships (A)	The Search For: Any, All, and Exact Phrase controls on the Advanced Search page are coded as radio buttons but are announced by JAWS as checkboxes for "All" and "Exact Phrase." The group of three controls forms a mutually exclusive choice and should be announced consistently as radio buttons.	JAWS announced: "Search for colon. Any radio button checked 1 of 3. All radio button not checked 2. Exact phrase radio button not checked 3 of 3. Testing confirmed All or exact phrases are announced as checkmarks."
<b>Filter Toggle Controls Coded as Links with No State</b>	4.1.2 Name, Role, Value (A)	The Filter expand/collapse controls on both the term search and author search sections are coded as anchor links (href="javascript:void(0)") rather than buttons, and do not expose expanded or collapsed state. Screen reader users cannot determine whether a filter section is currently open or closed without activating the control.	JAWS announced the filter control as "Link filter." It should not be announced as a link, but as an accordion with states. Axe DevTools: aria-role-missing critical violation on <a class="filter-toggle" href="javascript:void(0)"> for both term search and author search filter toggles.
<b>Citation Fieldset Group Announces All Fields Contiguously</b>	1.3.1 Info and Relationships (A)	When navigating to the citation search section by arrow key, JAWS announces all citation fields (select journal, year, volume, issue number, first page) as a single contiguous block of text rather than as individual interactive controls. The fields are only individually accessible via Tab navigation.	JAWS announced: "Citation umbrella box collapsed dash select a journal citation year edit citation year citation volume edit citation volume citation issue number edit citation issue number first page." Testing confirmed: All text is on the same line together and cannot be accessed via arrow keys.

Opportunity Area	WCAG Success Criteria	Description	Example
<p><b>Insufficient Color Contrast on Search Buttons</b></p>	<p>1.4.3 Contrast (Minimum) (AA)</p>	<p>All Search buttons on the Advanced Search page (Term Search, Author Search, Article Title Search, Citation Search, DOI Search) use white text (#ffffff) on the primary blue background (#008ab7), producing a contrast ratio of approximately 3.94:1. This applies consistently across all five search action buttons on the page.</p>	<p>Axe DevTools: color-contrast violations on #btnAdvancedSearchTop, #btnAdvancedAuthorSearchTop, #btnAdvancedTitleSearch, #btnAdvancedCitationSearch, and #btnDoiSearch. All share foreground #ffffff, background #008ab7, ratio 3.94:1. Required: 4.5:1.</p>

**Impact Summary**

The Advanced Search page offers a valuable feature set for researchers who need to locate content by author, citation details, or DOI, but several interaction patterns create unnecessary friction for assistive technology users. The combination of arrow-key-invisible input fields, filter toggles that do not announce their state, and a citation fieldset that collapses all its fields into a single announced string means that a screen reader user must rely almost entirely on Tab-based navigation to interact with this page. Correcting the filter toggle role and state, adding visible labels to the search fields, ensuring arrow-key accessibility for all form inputs, and updating the Search button colors would make this page’s powerful search functionality accessible to the full range of users who could benefit from it.

### Advanced Search Page Screenshot

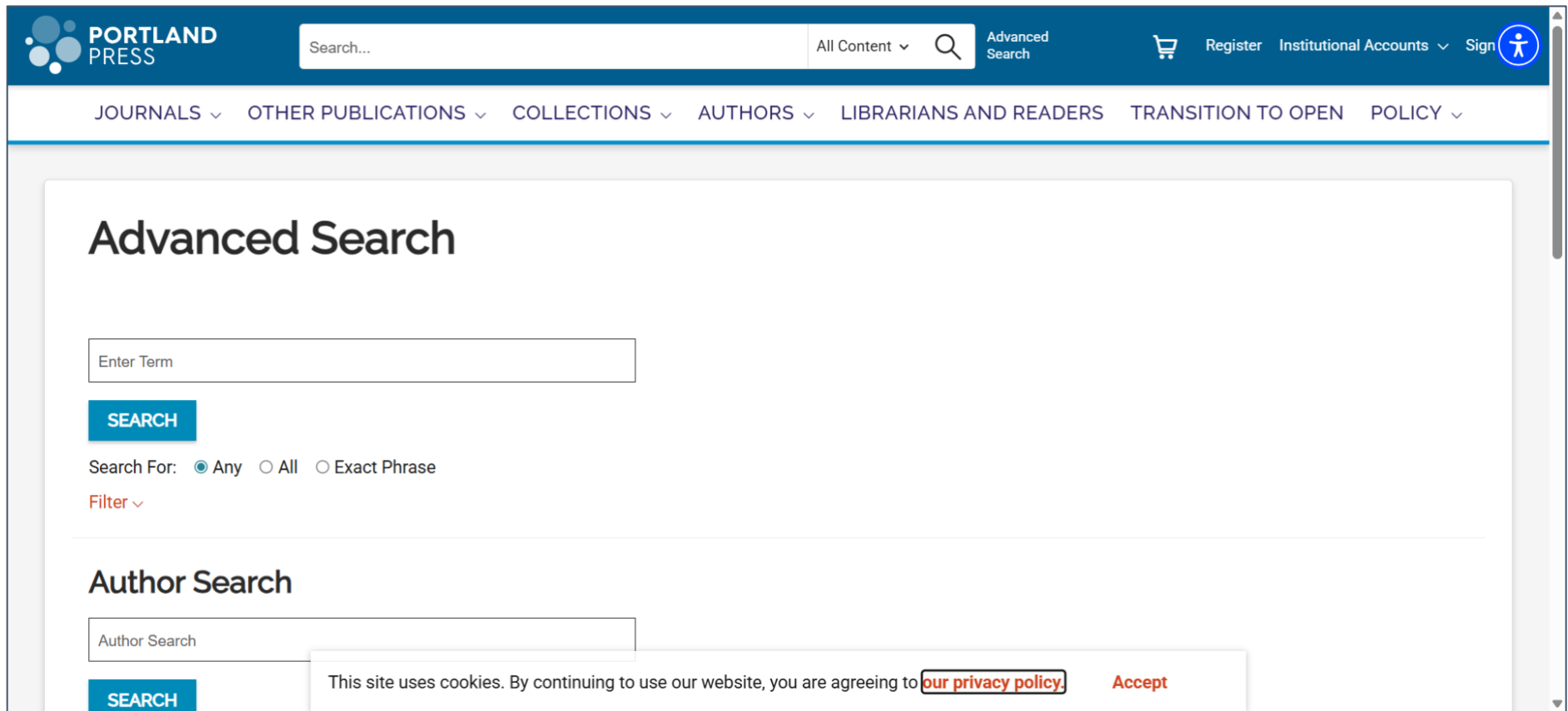


Figure 4: Portland Press Advanced Search page showing term search, search scope radio options, Filter control, and Author Search section.

## Code Recommendations and Technical Guidance

The following examples represent HTML-first solutions for five of the most impactful opportunity areas identified. These are starting points, not prescriptive implementations. Developers should test all changes with JAWS 2025, NVDA, and keyboard-only navigation before deployment, and may use alternative CSS or JavaScript approaches as long as the underlying accessibility outcomes are achieved.

### 1. Add an H1 Page Heading to the Home Page

**WCAG Reference:** 1.3.1 Info and Relationships (A)

**Current Implementation:**

```
<!-- Current: no H1 on the home page -->
<!-- First heading JAWS encounters: -->
<h2>Your Science, Your Publisher</h2>
<h2><a href="/open-access">Open Access</a></h2>
```

**Recommended Implementation:**

```
<!-- Recommended: add a visually styled H1 as the primary page identifier -->
<!-- The H1 can be visually prominent or visually hidden if design requires -->
<h1 class="site-title">Portland Press</h1>
<!-- Then keep Your Science, Your Publisher as an H2 tagline -->
<h2>Your Science. Your Publisher.</h2>
<h2><a href="/open-access">Open Access</a></h2>
```

### 2. Restore the WeChat QR Code to the Accessibility Tree

**WCAG Reference:** 1.1.1 Non-text Content (A)

**Current Implementation:**

```
<!-- Current: QR code image is hidden from assistive technology -->
<!-- Text instructs user to "use the QR code below" but AT cannot access it -->
<p>Use the QR code below and find us on WeChat</p>

```

**Recommended Implementation:**

```

<!-- Recommended: expose the QR code with descriptive alt text -->
<!-- A text alternative or link should accompany any QR code -->
<p>Find us on WeChat. Scan the QR code or visit the WeChat ID directly.</p>

<!-- Optionally add a text-based WeChat ID as fallback -->
<p>WeChat ID: BiochemicalSociety</p>

```

**3. Correct the Filter Toggle Role and State****WCAG Reference: 4.1.2 Name, Role, Value (A)****Current Implementation:**

```

<!-- Current: filter toggle coded as anchor link, no state -->
<a class="filter-toggle" href="javascript:void(0)">
  <span class="advanced-search-filter-label-text">Filter</span>
  <i class="icon-general_arrow-down"></i>
</a>

```

**Recommended Implementation:**

```

<!-- Recommended: use a button with aria-expanded and aria-controls -->
<button type="button"
        class="filter-toggle"
        aria-expanded="false"
        aria-controls="filter-section-term">
  Filter
  <svg aria-hidden="true" focusable="false"><!-- arrow icon --></svg>
</button>
<div id="filter-section-term" hidden>
  <!-- filter content -->
</div>
<!-- JS: toggle aria-expanded and remove/add hidden attribute on button click -->

```

## 4. Label the YouTube Iframe

**WCAG Reference:** 4.1.2 Name, Role, Value (A)

### Current Implementation:

```
<!-- Current: iframe has no title attribute -->
<iframe width="418" height="245"
  src="https://www.youtube.com/embed/Kuw-1gvts7Y"
  frameborder="0"
  allow="accelerometer; autoplay; clipboard-write; encrypted-media;">
</iframe>
```

### Recommended Implementation:

```
<!-- Recommended: add a title attribute describing the video content -->
<iframe width="418" height="245"
  src="https://www.youtube.com/embed/Kuw-1gvts7Y"
  title="Advancing Molecular Bioscience - Portland Press video"
  frameborder="0"
  allow="accelerometer; autoplay; clipboard-write; encrypted-media;">
</iframe>
```

## 5. Update Primary Action Color to Meet Contrast Requirements

**WCAG Reference:** 1.4.3 Contrast (Minimum) (AA)

### Current Implementation:

```
/* Current: primary action color fails contrast requirements */
.btn, .button, .al-link, .viewArticleLink {
  color: #008ab7; /* 3.94:1 on white - fails 4.5:1 requirement */
}
.btn.primary {
  background-color: #008ab7;
  color: #ffffff; /* 3.94:1 - also fails */
}
```

## Recommended Implementation:

```
/* Recommended: shift primary action color to meet 4.5:1 minimum */
/* Option 1: darken the teal (e.g., #006f93 achieves approximately 4.72:1 on white) */
.btn, .button, .al-link, .viewArticleLink {
  color: #006f93; /* approximately 4.72:1 on white - passes */
}
.btn.primary {
  background-color: #006f93;
  color: #ffffff; /* approximately 4.72:1 on #006f93 - verify with tool */
}
/* Always verify final color choices with a contrast ratio checker before deployment */
```

These code suggestions are recommendations and not guaranteed fixes. All changes should be thoroughly tested with assistive technology (screen readers, keyboard-only navigation) to confirm effectiveness before implementation. WCAG guidelines are designed to provide multiple paths to compliance. Developers may implement these improvements using alternative approaches with CSS and JavaScript, as long as the underlying accessibility principles are met.

## Final Thoughts and Recommendations

Portland Press has built a well-structured publishing platform with meaningful accessibility underpinnings: correct landmark regions across all tested pages, properly announcing navigation menus, and a working institutional access accordion. These reflect real investment in accessibility and provide a solid base to build on.

The opportunity areas identified in this report cluster into a small number of root causes. The platform's primary action color (#008ab7) runs just under the contrast threshold across essentially every interactive element, which means a single color token update could resolve most of the color contrast findings site-wide. Heading hierarchy gaps on the home page and article page are each a modest change with significant impact for screen reader navigation. The filter and date picker interaction patterns on the search pages represent the most complex fixes but also the highest functional impact for users who rely on keyboard navigation.

## Recommended Fixes by Priority

### Immediate Priority - Highest Impact

- Update the primary action color (#008ab7) to a darker teal that meets the 4.5:1 contrast requirement. A single CSS variable change resolves the majority of color contrast findings across the platform.
- Add an H1 heading to the Portland Press home page. This is a single-element change that immediately improves screen reader orientation for all users landing on the home page.
- Restore the WeChat QR code image to the accessibility tree with descriptive alt text and provide a text-based alternative (WeChat ID or URL) so blind users have a functional equivalent.

### High Priority - Significant Impact

- Recode the Filter expand/collapse controls on the Advanced Search and search results pages as buttons with aria-expanded state. This is a role and attribute change that corrects the programmatic structure without affecting visual appearance.
- Fix the date picker calendar grid so that only the selected date is announced as selected. This may require changes to the grid ARIA role or cell state management.
- Add a title attribute to the YouTube iframe on the home page identifying the video content.
- Label the YouTube iframe and resolve the phantom empty-href link in the main content region of the home page.

### Important Priority - Enhanced Experience

- Correct the article page heading hierarchy so that sidebar headings use H2 rather than H3, eliminating the skipped heading level.
- Add accessible names to unlabeled article links (issue cover, All Issues, CrossMark widget, Author and Article Information expand control) and hide decorative icon graphics from the screen reader.
- Add visible labels to the Advanced Search term and author search input fields. Relying on placeholder text alone does not meet WCAG 1.3.5 or best practices for form labeling.
- Ensure the citation fieldset fields on the Advanced Search page are individually reachable by arrow key, not just Tab, to support users who mix navigation modes.

### **Complimentary Consultation Included**

As part of this evaluation, Accessiblü's partnership with the LAA includes one hour of complimentary consulting with the team that conducted this evaluation. This session can be used to discuss implementation priorities, review technical approaches, or address questions about specific recommendations. To schedule this consultation, contact Jeff Rodgers directly at [jeff@accessiblu.com](mailto:jeff@accessiblu.com).

## **Disclaimer**

Accessiblü prepared this report as a high-level accessibility evaluation of the Portland Press platform, accessed via the University of Washington's institutional library portal ([offcampus.lib.washington.edu](http://offcampus.lib.washington.edu)). The evaluation utilized industry-standard testing methodologies, including screen reader testing (JAWS 2025) on Windows 11 with Google Chrome, keyboard-only navigation, and automated scanning with axe DevTools for select WCAG 2.2 AA success criteria.

This report does not represent a comprehensive WCAG compliance audit and should not be considered a certification of accessibility compliance. While significant accessibility opportunity areas and usability barriers have been identified, this evaluation was limited in scope and may not encompass all accessibility issues present on the platform or across all use cases, browsers, or assistive technology combinations.

### **No Legal Liability:**

Accessiblü offers this report for informational purposes only and assumes no legal responsibility for accessibility barriers or compliance failures resulting from its use. Organizations seeking formal certification of compliance should conduct a comprehensive audit inclusive of user testing with people with disabilities.

### **Limitations of Testing:**

This evaluation was conducted at a specific point in time (April 2026), and platform updates may have occurred after testing was completed. While automated tools and expert screen reader review were utilized, real-world users with disabilities determine the true measure of a platform's accessibility. User testing with participants who have a range of disabilities is recommended as a follow-up to this evaluation.

Pages were accessed through the University of Washington's institutional proxy ([offcampus.lib.washington.edu](http://offcampus.lib.washington.edu)). The proxy environment may affect certain dynamic behaviors and should be noted when comparing results to testing conducted in a direct-access environment.