

# High-level accessibility review – LAA (ASABE Platform)

## Primary Point of Contact

Austin Bramhall  
Project Manager

Deque Systems, Inc.

Web: [www.deque.com](http://www.deque.com)

Email: [austin.bramhall@deque.com](mailto:austin.bramhall@deque.com)

**August 16, 2024**



# High-level accessibility review – LAA (ASABE Platform)

## Contents

Summary.....	3
Top 3 problems for the ASABE Platform.....	3
Accessibility findings.....	3
Project wide issues.....	3
1. Landing Page .....	4
2. Search Results – Dairy Farming.....	6
3. Search Results Details .....	7
4. Advanced Search .....	8
5. Browse Publications.....	9
6. Search Help .....	10
7. Search Results Details Actual Document (PDF).....	11

# ASABE Platform

## Summary

---

### Top 3 problems for the ASABE Platform

This high-level assessment covers limited portions and functionality of the ASABE Platform. The assessment revealed issues with assistive technology compatibility, resulting in some users missing information required to understand content, states and operate functions. It is important to keep in mind that the findings represent a high-level assessment, and do not reflect the results of a Deque Comprehensive Web Assessment.

1. **Name, Role, Value** – Many of the form fields are missing accessible names.
2. **Info and Relationships** – Tables are missing proper table heading markup, many items that are not headings are marked up as such, headings are out of order in such a way that the hierarchy of some pages is lost.
3. **Label in Name** – Many form fields do not contain the visible label within the accessible name.

### Accessibility findings

---

#### Project wide issues

The issues presented in this section were identified in multiple pages and are recorded here to avoid repetition. These are applicable to each screen. Due to particularities, similar issues are still reported on a page per page basis, where applicable.

#### Automated findings using Axe

Issues found through automated testing come from the Axe plugin, an open source accessibility testing tool that is available for Chrome, Firefox and Edge. Details here: <https://www.deque.com/products/axe/>.

No automated issues found that are site wide.

#### Additional manual findings using NVDA screen reader

1. **SC 1.1.1 A** – Non-text Content - The ASABE logo does not have appropriate alternative text. The alternative text is set as “ASABE Logo” but should be “ASABE Engineering a Sustainable Future”.

## 1. Landing Page

### Source:

[http://offcampus.lib.washington.edu/login?url=https://elibrary.asabe.org/toc\\_landing.asp?conf=t3](http://offcampus.lib.washington.edu/login?url=https://elibrary.asabe.org/toc_landing.asp?conf=t3)

**Test case:** Test initial interface/landing page to ensure menus, sub-menus, search box, images, icons, etc. are accessible. Test Search Help and Browse Publications options.



Library Home

Search

Obtaining Full-Text

E-mail Alert

ASABE Home

Authors, please use the [Guide for Authors](#) when creating your articles.

#### Public Access Information

- = Public Access (PA)
- = PA Limited Time
- = Open Access
- = Contact Us For Purchase

## ASABE Technical Library

Search In:

All Categories

- [Search Help](#)
- [Browse Publications](#)
- [Google Advanced Search](#)

- Find words anywhere
- Document number/DOI
- Author(s)
- Keyword list
- Title

with all of the words:

with the exact word or phrase:

with at least one of the words:

Go

### New! In-Press Version of Journal Articles Now Included

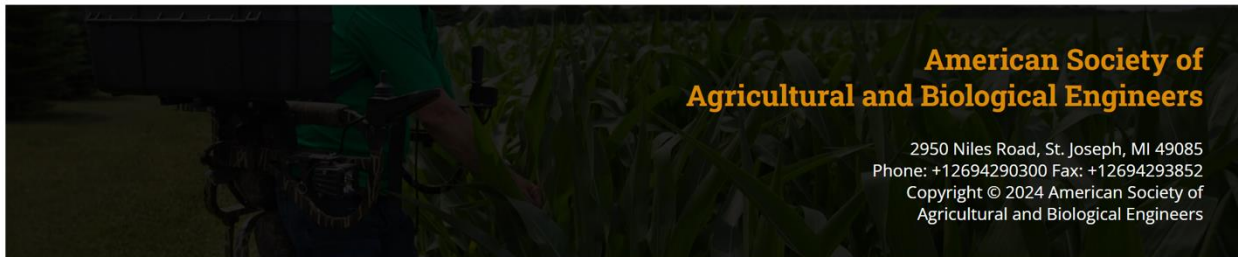
Journal manuscripts are now included on this site before editing or page layout. They will be replaced by the final version when published in the journal. Searches include in-press articles. View a list of in-press articles by going to the [Publications Included](#) page and clicking on a journal name.

### Options for Obtaining Full-Text

ASABE members receive free download credits. [more](#)

Access via your institution or company license agreement. [more](#)

Non-members may purchase downloads. [more](#)



### Automated findings using Axe

- SC 4.1.2 A** – Name, Role, Value – Search in combo box does not have an accessible name.
- SC 4.1.2 A** – Name, Role, Value – Checkboxes do not have an accessible name.
- SC 4.1.2 A** – Name, Role, Value – Text fields (with all words, with the exact word or phrase, with at least one of the words) are missing accessible names.

### Additional manual findings using NVDA screen reader

- SC 1.3.1 A** – Info and Relationships – The following are marked as headings but should not be: “Search Help, Browse Publications, Google Advanced Search, and Search In”.
- SC 1.3.1 A** – Info and Relationships – “Search Help, Browse Publications, and Google Advanced Search appear to be a list but are not marked up as such.
- SC 2.4.4 A** – Link Text (In-Context) – There are multiple “more” links that all go to different destinations that all have the same programmatic name.

4. **SC 2.5.3 A** – Label in Name – Text Fields (With all of the words, with the exact word or phrase, with at least one of the words) have a visible label but no programmatic label so the visible label is not in the accessible name.
5. **SC 2.5.3 A** – Label in Name – Checkboxes (find words anywhere, keyword list, document number, title, Author) have a visible label but no programmatic label so the visible label is not in the accessible name.
6. **SC 2.5.3 A** – Label in Name – Combo box (Search In) has a visible label but no programmatic label so the visible label is not in the accessible name.

## 2. Search Results – Dairy Farming

**Source:** <https://elibrary-asabe-org.offcampus.lib.washington.edu/newresults.asp?journals=All&anywhere=on&allwords=DAIRY+FARMING&exactphrase=&oneword=&Action=Go>

**Test case:** From the initial landing page, conduct a search for: **dairy farming**



Publications Included | Search Help | About | Contact Us Join

Library Home

Search

Obtaining Full-Text

E-mail Alert

ASABE Home

Authors, please use the [Guide for Authors](#) when creating your articles.

Public Access Information

- = Public Access (PA)
- = PA Limited Time
- = Open Access
- = Contact Us For Purchase

## Technical Library Search Results

### Products/Services Guide

[Advertise](#)

\* [ASABE Continuing Education Center](#) - ASABE and PDHengineer.com bring you access to a large library of courses and webinars designed exclusively as continuing education for professional engineers.  
\* [MidWest Plan Service \(MWPS\)](#) - MWPS publishes educational materials that use fundamental engineering principles to solve common agricultural and biological problems.

To receive an e-mail alert when new information on this subject is added to the site [click here](#).

Documents 1 to 10 of 997 matching the query "DAIRY near FARMING".

#### [Energy Efficiency in Raising Livestock at the Example of Dairy Farming](#)

**Citation:** 2009 Reno, Nevada, June 21 - June 24, 2009 096715. (doi: 10.13031/2013.27271)

**Authors:** Simone Kraatz, Werner E Berg

**Keywords:** Energy efficiency, energy balance, dairy farming, cumulative energy demand, milk production, energy intensity  
([Free Abstract](#)) ([Download PDF](#)) ([Export to EndNotes](#))

#### [Input of resources in dairy farming – energy, arable land and reduction of greenhouse gas emissions](#)

**Citation:** 2010 Pittsburgh, Pennsylvania, June 20 - June 23, 2010 1009357. (doi: 10.13031/2013.29860)

**Authors:** Simone Kraatz, Werner E Berg

**Keywords:** Greenhouse gas emission, energy intensity, dairy farming, land use  
([Free Abstract](#)) ([Download PDF](#)) ([Export to EndNotes](#))

#### [Survey and future prospects in precision dairy farming](#)

**Citation:** 10th International Livestock Environment Symposium (ILES X) . (doi: 10.13031/iles.18-053)

**Authors:** Hugo FM Milan, Kristen M Perano, Kifle G Gebremedhin

**Keywords:** Dairy cows, precision livestock farming, machine learning, computer vision.  
([Free Abstract](#)) ([Download PDF](#)) ([Export to EndNotes](#))

#### [Life cycle assessment of different dairy farms considering building materials for barns, milking parlors and milking tanks](#)

**Citation:** 2020 ASABE Annual International Virtual Meeting 2000516. (doi: 10.13031/aim.202000516)

**Authors:** Omar Hijazi, Maria Haslbeck, Mona Maze, Mohamed Samer, Maximilian Treiber, Heinz Bernhardt

**Keywords:** Greenhouse gas emission balance; dairy cowsheds; Life cycle assessment, milking parlors  
([Free Abstract](#)) ([Download PDF](#)) ([Export to EndNotes](#))

### Automated findings using Axe

No automated issues found.

### Additional manual findings using NVDA screen reader

1. **SC 1.4.1 A** – Color as Information – In the public access information key the green (#02FE07) and yellow (#FDD903) locks do not have enough contrast (1:2) between them.
2. **SC 1.4.11 AA** – Non-text Contrast – In the public access information key the yellow (#FDD903) and green (#02FE07) locks do not have at least 3:1 contrast (1.4:1) with the white background (#ffffff).
3. **SC 2.4.4 A** – Link Text (In-Context) – There are multiple repeated links “Free Abstract, Download PDF, and Export to EndNotes” each link has a different destination but the same accessible name.

### 3. Search Results Details

**Source:** <https://elibrary-asabe-org.offcampus.lib.washington.edu/azdez.asp?search=1&JID=5&AID=29860&CID=pitt2010&T=1&urlRedirect=>

**Test case:** Test individual search result landing page & test actual document (PDF, video, etc.).



[Go Back](#)

#### Input of resources in dairy farming – energy, arable land and reduction of greenhouse gas emissions

Simone Kraatz , ASABE Member

University of Wisconsin-Madison , 460 Henry Mall, 53706 Madison , USA

Werner E Berg

Leibniz Institute for Agricultural Engineering Potsdam-Bornim , Max-Eyth-Allee 100, 14469 Potsdam , Germany

[This is not a peer-reviewed article.](#)

Paper No: 1009357  
An ASABE Meeting Presentation

**Written for presentation at the**

2010 ASABE Annual International Meeting  
Sponsored by ASABE  
David L. Lawrence Convention Center  
Pittsburgh, Pennsylvania  
June 20 – June 23, 2010

Abstract. The sustainable use of natural resources and the impacts of greenhouse gas (GHG) emissions on the global climate have become important concerns world-wide.

This paper discusses the importance of management strategies in livestock keeping and how the intensity of production may influence the energy intensity, the generation of GHG emissions and the requirement of arable land. Therefore different milk performances as well as diet compositions are proofed by using site conditions of Germany.

The cumulative energy demand (CED) of the production of farm-produced forage is calculated on the base of direct and indirect energy inputs. The CED is linked with carbon dioxide (CO<sub>2</sub>) emissions. Methane emissions of enteric fermentation and of the excrements are determined as well as the soil-borne nitrous dioxide emissions.

The variation of the share of concentrate in a mixed ration shows that higher GHG emissions by the production of concentrate are compensated by its reducing effect on the emissions from digestion.

The GHG emissions for different milk performances vary in a range of 1.01 (4,000 kg ECM cow-1 year-1) to 0.38 kg CO<sub>2</sub>-equi. kg-1 ECM (12,000 kg ECM cow-1 year-1) as well as the energy intensity varies from 2.14 to 1.83 MJ kg-1 ECM, and the use of arable land from 1.71 m<sup>2</sup> to 1.09 m<sup>2</sup> kg-1 ECM, respectively.

The investigations show that improvements in resource use (e.g. fossil energy, land) and the mitigation of GHG emissions are not always in agreement. Therefore a holistic view on the environmental impacts in dairy farming is highly recommended to enhance its sustainability.

#### Automated findings using Axe

No automated issues found on this page.

#### Additional manual findings using NVDA screen reader

1. **SC 1.1.1 A** – Non-text Content – All the graphs and chart images use the filename as alternative text which does not describe the content of the image.
2. **SC 1.3.1 A** – Info and relationships – The headings on page are out of order in such a way that the hierarchy of the page is misrepresented. The headings are used based on visual size rather than the purpose of hierarchy.
3. **SC 1.3.1 A** – Info and relationships – All tables on the page have column header content but they are not setup with the proper semantic table headers.

## 4. Advanced Search

### Source:

[http://www.google.com.offcampus.lib.washington.edu/advanced\\_search?as\\_sitesearch=elibrary.asabe.org](http://www.google.com.offcampus.lib.washington.edu/advanced_search?as_sitesearch=elibrary.asabe.org)

**Test case:** Test advanced search page: [Google Advanced Search](#)



### Advanced Search

Find pages with...

all these words:

To do this in the search box

Type the important words: tricolor rat terrier

this exact word or phrase:

Put exact words in quotes: "rat terrier"

any of these words:

Type OR between all the words you want: miniature OR standard

none of these words:

Put a minus sign just before words you don't want:  
-rodent, -"Jack Russell"

numbers ranging from:

 to 

Put 2 periods between the numbers and add a unit of measure:  
10..35 lb, \$300..\$500, 2010..2011

Then narrow your results by...

language:

Find pages in the language you select.

region:

Find pages published in a particular region.

last update:

Find pages updated within the time you specify.

site or domain:

Search one site (like wikipedia.org) or limit your results to a domain like .edu, .org or .gov

terms appearing:

Search for terms in the whole page, page title, or web address, or links to the page you're looking for.

file type:

Find pages in the format you prefer.

usage rights:

Find pages you are free to use yourself.

Advanced Search

### Automated findings using Axe

1. **SC 1.4.3 AA** – Contrast Minimum – Gray (#777777) "To do this in the search box" text only has a 4.47:1 contrast ratio with the white (#ffffff) background and must have at least 4.5:1 contrast.
2. **SC 1.4.3 AA** – Contrast Minimum – Gray (#777777) footer menu text (help, privacy, terms) only has a 4.15:1 contrast ratio with the light gray background (#f2f2f2) and must have at least 4.5:1 contrast.
3. **SC 1.4.3 AA** – Contrast Minimum – White (#ffffff) "Advanced search" text only has a 3.41:1 contrast ratio with the blue (#4d90fe) button background and must have at least 4.5:1 contrast.
4. **SC 4.1.2 A** – Name, Role, Value – All six select boxes (language, region, last update, terms appearing, file type, usage rights) are missing an accessible name.

### Additional manual findings using NVDA screen reader

Not completed due to insufficient time.



## 5. Browse Publications

Source: <https://elibrary-asabe-org.offcampus.lib.washington.edu/toc.asp>

Test case: Test Browse Publications



Publications Included | Search Help | About | Contact Us Join

Library Home

Search

Obtaining Full-Text

E-mail Alert

ASABE Home

Authors, please use the [Guide for Authors](#) when creating your articles.

Public Access Information

- = Public Access (PA)
- = PA Limited Time
- = Open Access
- = Contact Us For Purchase

## Publications Included

- [Standards](#)
- Journals
  - [Journal of the ASABE](#)
  - [Transactions of the ASABE](#)
  - [Transactions of the ASAE](#)
  - [Biological Engineering Transactions](#)
  - [Biological Engineering](#)
  - [Applied Engineering in Agriculture](#)
  - [Journal of Agricultural Safety and Health](#)
  - [Journal of Natural Resources and Agricultural Ecosystems](#)
- Resource Magazine
  - [Resource Magazine](#)
- Annual Meeting Papers
  - [2024 Anaheim, California July 28-31, 2024](#)
  - [2023 Omaha, Nebraska July 9-12, 2023](#)
  - [2022 Houston, Texas July 17-20, 2022](#)
  - [2021 ASABE Annual International Virtual Meeting, July 12-16, 2021](#)
  - [2020 ASABE Annual International Virtual Meeting, July 13-15, 2020](#)
  - [2019 Boston, Massachusetts July 7-10, 2019](#)
  - [2018 Detroit, Michigan July 29 - August 1, 2018](#)
  - [2017 Spokane, Washington July 16 - July 19, 2017](#)
  - [2016 Orlando, Florida July 17 - July 20, 2016](#)
  - [2015 New Orleans, Louisiana July 26 - July 29, 2015](#)
  - [2014 Montreal, Quebec Canada July 13 - July 16, 2014](#)
  - [2013 Kansas City, Missouri July 21 - July 24, 2013](#)
  - [2012 Dallas, Texas July 29 - August 1, 2012](#)
  - [2011 Louisville, Kentucky, August 7 - August 10, 2011](#)
  - [2010 Pittsburgh, Pennsylvania, June 20 - June 23, 2010](#)
  - [2009 Reno, Nevada, June 21 - June 24, 2009](#)
  - [Special Session: State-of-the-Art in Application of Finite Element Numerical Solutions to Engineering Problems](#)

### Automated findings using Axe

1. **SC 1.3.1 A** – Info and Relationships – Definition list under journals, resource magazine, annual meeting papers, and section meeting papers are not formatted correctly. They are missing <dt> tags.
2. **SC 1.3.1 A** – Info and Relationships – Several lists (ul, ol) have direct children that are not allowed. This occurs on lists that are not nested properly.
3. **SC 2.4.4 A** – Link Text (in context) – There are two empty links under “section meeting papers”.

### Additional manual findings using NVDA screen reader

Not completed due to insufficient time.

## 6. Search Help

Source: <https://www.asabe.org/TechnicalLibraryHelp> ag

Test case: Test Search Help



[Home](#) > [Publications & Standards](#) > [Technical Library](#) > [Technical Library Help](#)

[Print](#)

## Technical Library Help

[Return to Search](#)

### Contact Us

For assistance or for suggestions, please email [TechnicalLibraryHelp@asabe.org](mailto:TechnicalLibraryHelp@asabe.org). See the [About](#) page for an overview.

### Searching the ASABE Technical Library

- [Technical Library search engine](#) - See tips below. The percent (%) symbol wildcard does **not** work with the "with all of the words" option.
- [Google search](#) - add your keywords to the search box. See notes at the end of this page about using [Google](#).
- [Google Advanced Search](#) - more control over the results with logical operators.
- [Google Scholar](#) - add your keywords to the search box.
- [Discovery Services](#) - other indexers like Meta and Scopus.

Site licenses are purchased by many libraries and allow full access to the documents that are available. Contact your library staff and request that they obtain a site license for your location. Without a site license, you have free access to the abstracts and the Endnote RIS reference download for a document.

### Technical Library Search Engine Tips

Results are displayed in order of relevance. Relevance may be determined by how close one keyword is to another in the text.

Results are limited to 1000 listings. If you reach 1000, please change your query to see everything relevant to your search. Searches are not case-sensitive. The search will not fix spelling errors for you, so "ageing" and "aging" are not considered equal. Words with other spelling variations will be handled differently like "flavor" and "flavour", so choose the "**with at least one of the words**" option and search for both words. You may want to use wildcards for non-English characters. Also, see the **Exceptions and Notes** section near the end of this page.

### Automated findings using Axe

1. **SC 1.4.4 AA** – Resize Text – In the <meta name="viewport"> Both initial-scale and maximum-scale are set to 1 which can prevent scaling and zooming.
2. **SC 2.4.4 A** – Link Purpose (in Context) – Search Icon and social icons use css graphics and do not have an accessible name.

### Additional manual findings using NVDA screen reader

Not completed due to insufficient time.

## 7. Search Results Details Actual Document (PDF)

**Source:** <https://elibrary-asabe-org.offcampus.lib.washington.edu/pdfviewer.asp?param1=s:/8y9u8/q8qu/tq9q/5tv/L/7u34IGGP/GPMNHL.5tv&param2=O/HL/IGIK&param3=HIO.PL.HGK.HGP&param4=27271>

**Test case:** Test individual search result actual document (PDF, video, etc.).



2950 Niles Road, St. Joseph, MI 49085-9659, USA  
269.429.0300 fax 269.429.3852 hq@asabe.org www.asabe.org

*An ASABE Meeting Presentation*

*Paper Number: 096715*

### **Energy Efficiency in Raising Livestock at the Example of Dairy Farming**

**Simone Kraatz and Werner E. Berg**

Leibniz-Institute for Agricultural Engineering Potsdam-Bornim , Max-Eyth-Allee 100, 14469  
Potsdam, Germany, sikraatz@atb-potsdam.de

**Written for presentation at the  
2009 ASABE Annual International Meeting  
Sponsored by ASABE  
Grand Sierra Resort and Casino  
Reno, Nevada  
June 21 – June 24, 2009**

#### **Automated findings using Axe**

Not completed due to insufficient time.

#### **Additional manual findings using NVDA screen reader**

Not completed due to insufficient time.