



# Ecosystem Commons

Gathering Place for A Community on Ecosystem Services



2012 Progress Report

# Ecosystem Commons 2012 Progress Report

May 2013

*Author*

Rob Fiegener

*Prepared by*

## THE INSTITUTE FOR NATURAL RESOURCES

Created by the Oregon Legislature through the 2001 Oregon Sustainability Act, the Institute for Natural Resources' mission is to provide access to integrated knowledge and information to inform natural resource decision making and develop solutions in the context of sustainability.

The Institute for Natural Resources is an Oregon University System institute located at Oregon State University and Portland State University.

### INR-OSU (Headquarters)

210 Strand Agricultural Hall  
Oregon State University  
Corvallis, Oregon 97331-2208  
541.737.9918  
<http://oregonstate.edu/inr>

### INR-PSU

PO Box 751  
Portland State University  
Portland, Oregon 97207-0751  
503.725.9950  
<http://pdx.edu/inr>

For more information about this report please contact [rob.fiegener@oregonstate.edu](mailto:rob.fiegener@oregonstate.edu).

## Organizations

The Ecosystem Commons is funded by:



## Acknowledgements

This report represents the work of Sally Duncan, Julie Risien, and Rob Fiegener of the Institute for Natural Resources. We thank Abbie Sigmon for her assistance with the report.

## Disclaimer

This progress report is submitted to the U.S. Forest Service as part of USFS Cooperative Agreement # 09-CA-11132524-269.

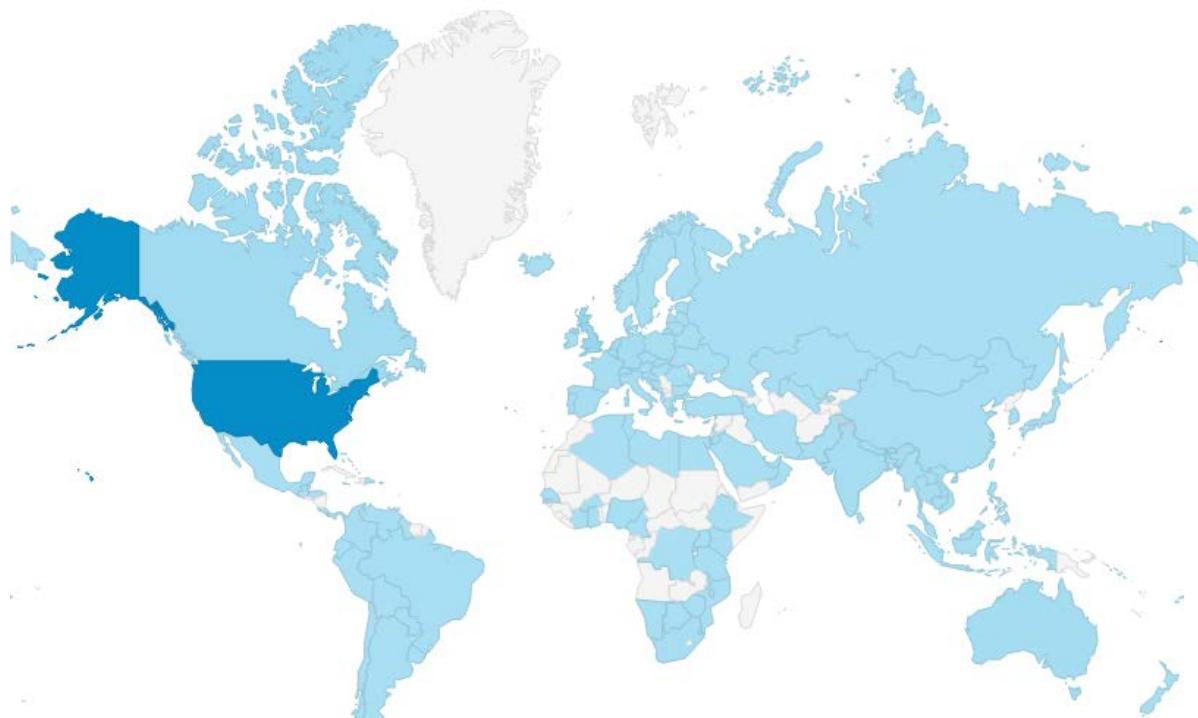
The contents of this report reflect the views of the authors who are solely responsible for the facts and accuracy of the material presented. This report does not constitute a standard, specification, or regulation.

# Table of Contents

<b>2012 YEAR IN REVIEW .....</b>	<b>1</b>
Impact: Visitation.....	2
Site membership .....	3
Site usage & usability: Survey & response.....	5
Progress toward goals .....	6
Challenges .....	8
Opportunities.....	9
<b>APPENDIX.....</b>	<b>11</b>
Appendix 1: Site usage survey results.....	11

## 2012: Year in Review

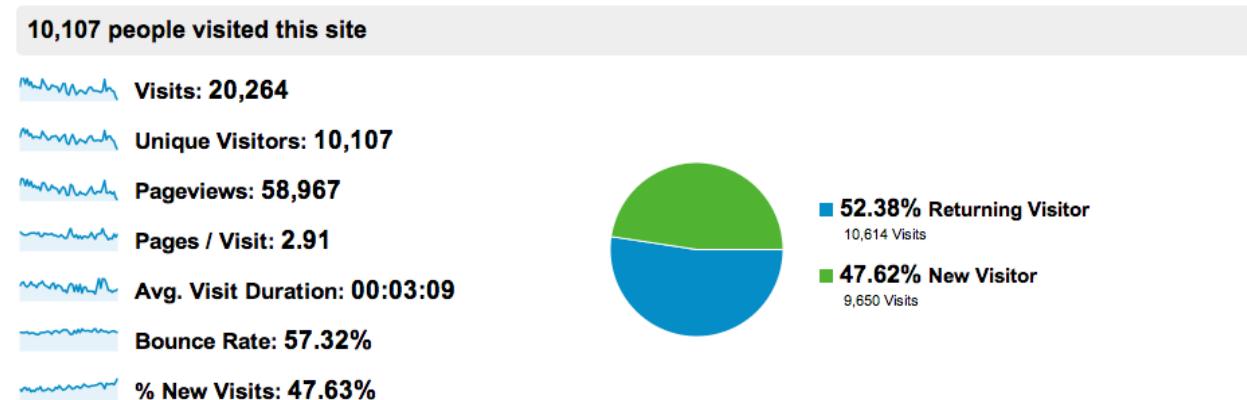
2012 represents months 7-18 of the Ecosystem Commons website (<http://ecosystemcommons.org>) after its public launch in mid-2011. The site membership has grown at a measured pace, and the site has increased its name recognition and established a reputation as a go-to place for connecting with ecosystem services professionals. A key challenge that remains for site managers is converting the members of the online community from passive consumers of information to active contributors to the site. Overall feedback has been positive and we are working towards making the Commons a better, more useable resource for the ecosystem services community.



**Figure 1.** Visitors to Ecosystem Commons come from all corners of the globe. Blue shading indicates visitation. Dark blue indicates heaviest visitation.

## Impact: Visitation

2012 was the first full calendar year of operation for Ecosystem Commons. During 2012 the site attracted visitors from all over the planet, with 10,107 unique visitors making 20,264 visits to the site (Figures 1 & 2). The volume of traffic to the site shows modest increases over 2011, in which there were 4,498 unique visitors from 7/1/2011 and ending 12/31/2011. The average duration of a visit was 3 minutes and 9 seconds (Figure 2). As was noticed in the previous annual report, there continues to be a strong work-week pattern to the usage. We interpret this to mean that the vast majority of users are professionals who are using the Commons as part of their professional work day.



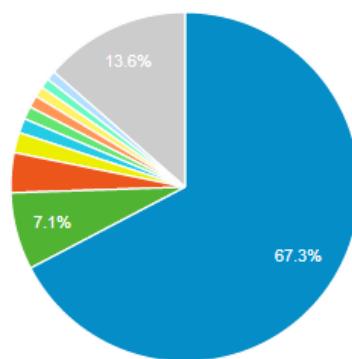
**Figure 2.** Website visitation summary for the period from 1/1/2012 and ending 12/31/2012

### Location of users

Web traffic, like in 2011, is mostly from the United States, accounting for approximately two-thirds of all visits (Table 1). One-third of all traffic came from outside the US. Other major sources of visitation to the site are predominantly English-speaking countries: the United Kingdom, Canada, and Australia.

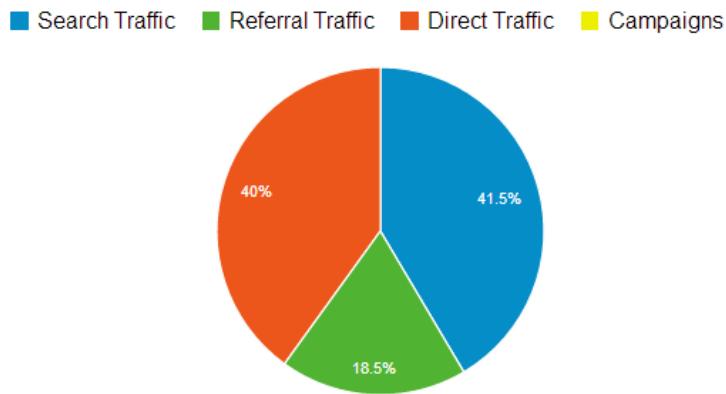
**Table 1. Location of users**

Country / Territory		Visits	% Total
1 United States	■	13,653	67.3%
2 United Kingdom	■	1,450	7.1%
3 Canada	■	749	3.7%
4 Australia	■	379	1.9%
5 Germany	■	274	1.4%
Other		3,776	18.6%
Total		20,281	100.0%



### Source of Traffic

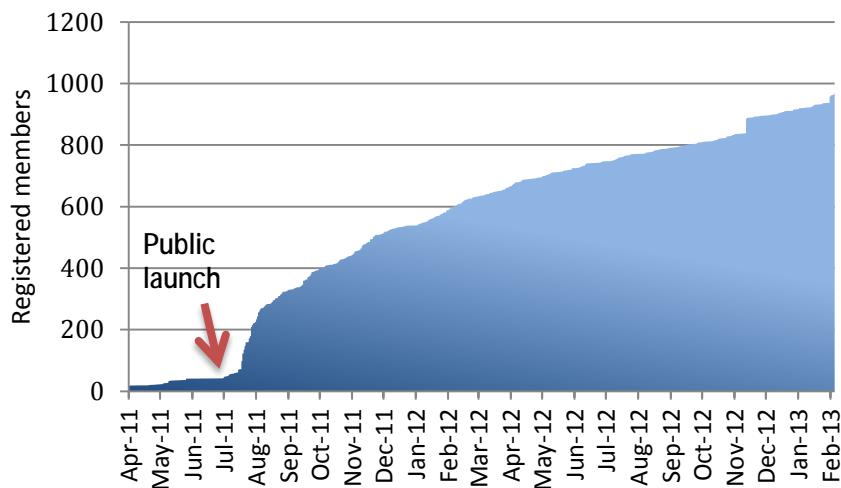
8,412 visits (41.5%) to Ecosystem Commons in 2012 originated as a search on a search engine (predominantly Google, with smaller amounts from Bing, Yahoo, etc.) (Figure 3). Nearly an equal number, 8,142 (40%) of visits were a result of direct traffic, which includes clicked links on emails, and also includes when the site address “ecosystemcommons.org” was typed directly into the URL portion of the web browser or if a browser bookmark was used. The remaining 3,749 visits (18.5%) are classified as referral traffic, which is links from other websites. The primary source of referral traffic was LinkedIn. Other significant sources of referral traffic are EcosystemMarketplace and the ACES Conference website hosted by the University of Florida.



**Figure 3.** Sources of website traffic

### Site Membership

At the end of 2012 there were 962 registered members on the website with a personal profile (Figure 4). 379 new users registered for the site during 2012. Members are concentrated in the United States and western Europe, with a sprinkling of members from other locations (Figure 5). Roughly 24% of users have signed up with their Gmail or Yahoo email address, which may indicate personal usage. There is an approximately equal distribution of users between academic, agency, and NGO sectors (Table 2).



**Figure 4.** Growth in registered membership



**Figure 5.** Location of registered members who have provided their location

**Table 2.** Estimated sectors of Ecosystem Commons members based on email address provided

Sector	% members
Academic (.edu)	13.1%
Government (.gov and .us)	14.3%
NGO (.org)	14.4%
Personal (gmail, yahoo)	24.1%
Other (including .com)	34.1%

## Site Usage & Usability: Survey & Response

From February 20 through March 30 of 2012, an online survey was presented to the users of Ecosystem Commons to help us understand the uses and needed improvements for the site. Results of the survey are presented in Appendix 1 of this report. Some highlights are listed below:

- Most users visited the Commons once a week or more
- Representation is strong across NGO, private, government, and academic sectors
- Users participate in the Commons in order to share, find, learn, and discuss ecosystem services information, knowledge, perspectives, ideas, and projects.

FEEDBACK FROM SURVEY	RESPONSE
Update the Help menu	The Help menu has been thoroughly edited and special screen-captures have been included in order to help with site navigation. Special attention has also been given to the overall look and fluidity of the site, within the constraints imposed by the software and our limited budget. Site navigation is easier due to the changes in colors, tabs, and general page organization.
Provide more guidance to users	
Make the email notifications more attractive	Email notifications have been revised to improve their usability by indicating the contributing author and the group in which the update has occurred. Users have fine-grained control of what notifications they receive and the frequency at which they are sent. Options for delivery range from individual notifications that are sent immediately, to a once-a-week digest of all activity to which that user is subscribed. The changes made were those that could be implemented without hiring an outside consultant, which was beyond the budget.
Include an ecosystem services news feed	
Include a jobs board to post and search for jobs	The logistics for incorporating an ecosystem services news feed and job board are being explored. These are valuable assets but must be curated, as feeds that are automatically generated will include content that is inappropriate (off-topic) for the site. A jobs board requires active posting of new jobs, and the success will depend on input from the community to make this a valued resource. If the posting volume is low and frequency is sporadic, the feature could be more of a liability, indicating low activity.
Highlight the Commons at ecosystem services conferences	The Ecosystem Commons was represented at several conferences in 2012. Rob Fiegener gave a presentation featuring the Commons titled "Conservation Collaboration: Connecting through Online Communities" at the Society for Conservation Biology North American Congress in July. Sally Duncan and Rob Fiegener presented at a working group at the August conference of the Ecosystem Services Partnership in Portland. Julie Risien presented "Collaborative Online Networks: What does it take?" on the Ecosystem Commons at the EcoSummit conference in Ohio. We wrapped up the year by exhibiting with a booth at the ACES and Ecosystem Markets

	conference in Florida. Additionally, Rob Fiegener moderated a workshop following a panel on Ecosystem Services at the NatureServe Biodiversity Without Borders conference in Portland in April 2012.
Integration of social media	We have been building a presence on standard social media sites. There are active Twitter, Facebook, and LinkedIn pages that our users may incorporate into their social networks. Adding buttons to share items from the Commons with social sites is an important feature that will be included in any site upgrade we are able to complete, subject to funding.

## Progress toward Goals and Objectives

The primary proposed goal of this project was to “*Create a networking and information sharing hub for ecosystem services science, practice, and policy.*” We believe we are meeting this goal, having created a site that by the end of 2012 had nearly 1000 registered members from all sectors, and many more unregistered visitors, who frequent the site for the purpose of learning and sharing information about ecosystem services.

The second proposed goal of this project was to “*Design and continually upgrade a searchable database to aid in identification of people, projects, information, resources, upcoming opportunities, and news.*”

The Ecosystem Commons offers several ways to search and browse the information present on the site. In addition to the multipurpose “search” box at the top of every page are the following customized ways to access information:

**People** – Perhaps the most valuable and compelling asset of the site is its directory of members. Individuals can be found by name, organization, keyword or location, and a map interface is featured prominently on the home page for geographically locating people and potential partners. This map (Figure 5) is interactive allowing zooming, panning, and indicating the name of the user when clicked, linking to that user’s profile.

**Projects** – Ecosystem Commons members are able to upload project information and links in a variety of ways. We have established the Catalog feature of the website as a place for members to share information about ecosystem services projects and programs they work on and discover what others are doing. Users often store project information within relevant group pages. All projects and research on the site can be found via search. Additionally, all projects may be tagged with keywords that characterize the project with the relevant ecosystem services, ecosystems, funding sources, and the type of effort (e.g. research, valuation, credit trading). These keywords enable browsing and facilitate discovery of content across the site.

**Upcoming opportunities** – The Ecosystem Commons community calendar is frequently updated by members and is a valuable resource. INR staff continues to moderate and update the calendar.

**News** – The Commons offers the ability for users to post news they find of interest. This is an underutilized feature of the site that should benefit from enhanced integration with social media as we upgrade the software underlying the website.

The third proposed goal of the project was to “*Catalyze dialogue and incubate ideas by providing a facilitated space for ongoing, managed communication.*” The most visible and popular indicator of progress here is the “Soapbox” feature of Ecosystem Commons, which has been a successful forum for dialogue and ideas. Soapbox posts are generally appreciated for the quality of the comments they

attract rather than the quantity. A new Soapbox was posted roughly every two weeks to 1 month. The Soapboxes for 2012 on average generated more comments than those in 2011.

**Table 5:** Soapbox Activity in 2012

Author	Soapbox Title	Date	Visitors*	Comments
<b>Nicole Maness</b>	A quest for the Holy Grail? Balancing precision and practicality in ecosystem services metrics.	5-Jan-12	371	11
<b>Dixon Landers</b>	If we cannot define and quantify Ecosystem Services consistently and systematically – we might be lost!	19-Jan-12	853	7
<b>Sally Collins</b>	Value Beyond Markets. Where are the innovative examples that incorporate true value of ecosystem services into decisions?	2-Feb-12	634	4
<b>Larry Kapustka</b>	Rethinking the connections of Ecosystem Services to Sustainability	15-Feb-12	350	12
<b>Adam Davis</b>	Beyond the ‘Either/Or’ of Markets v. Regulations	1-Mar-12	327	7
<b>Becca Madsen</b>	Good One! Communicating Ecosystem Services	14-Mar-12	1075	16
<b>Richard Norgaard</b>	Ecosystem services: From eye-opening metaphor to complexity blinder	27-Mar-12	720	17
<b>Karl Morgenstern</b>	Regulation might drive markets, but really good ideas drive revolutions	11-Apr-12	204	8
<b>Winnie Lau</b>	Stack them? Bundle them? Just get the investment for ecosystem services – as many as possible	27-Apr-12	343	6
<b>Lauretta Burke</b>	Does economic valuation really influence policy?	10-May-12	534	8
<b>Sylvia Tognetti</b>	Valuing ecosystem services in a time of austerity and rampant disinformation	24-May-12	335	3
<b>Austin Troy</b>	Ecosystem Services and Field of Dreams Paradox	7-Jun-12	485	20
<b>Christina MacFarquhar</b>	Could financial institutions hold the key to accounting for natural capital?	21-Jun-12	384	2
<b>Sissel Waage</b>	The ecosystem services ‘tipping point’: how and when do we shift from theory to widespread practice in the private sector?	10-Jul-12	485	6
<b>Mylea Bayless</b>	Let’s Talk Bats	30-Jul-12	103	1
<b>Peter Donovan</b>	The Soil Carbon Challenge	12-Sep-12	214	3
<b>Yannick Beaudoin</b>	What (or why) do we need to value?	8-Nov-12	116	1

\*The numbers of visitors listed on this table are limited to visits that took place in 2012.

The fourth goal of the proposed site was to “*Establish a process for transparent testing and adaptation and peer review of ecosystem service tools.*” After several discussions and attempts to address this, this goal remains elusive. A group has formed around the topic of “tools” but significant progress towards this goal has not been achieved and is unlikely without a large commitment of financial support and partner investments. Progress towards meeting this goal is dependent on participants engaging in a sustained effort. Similar efforts, such as the BSR “Environmental Services, Tools & Markets Working Group” have greater incentives and are considered more likely to have an impact.

## Challenges

### **Spam**

As the site has increased in visibility, it has also become an increasingly attractive target for spam. Attempts at “spamming” the Commons have primarily come in the form of bogus users who post inappropriate content, typically laden with links to commercial sites. Spam obviously degrades the quality of the site, and carries the risk of triggering email notifications to users. This aggravates the members who receive these messages, and contributes to shrinking the membership as frustrated members leave the site.

In late 2012 steps were taken to prevent inappropriate and undesirable content from being added to the site. New members are no longer immediately granted access to posting material on the site after registering. The registration process is now moderated with manual approval of each new member by the site administrator. This has proven to be effective, although it comes at a cost of administrative oversight and delayed acceptance for legitimate new members.

Originally posting comments or any content was restricted to registered, logged-in members. This was selected to elevate the quality of the material on the site, in that every piece of content came from a known and clearly-identified contributor. We have routinely heard that this requirement was a barrier to participation, and that users would be more likely to post comments if they did not need to register or log in. In mid-2012, faced with decreasing comments on the site, the site was altered so that comment submission is available to all site visitors. Comments from non-authenticated users (those who are not logged in) are held for moderation so that administrators may accept or reject the post.

### **Cultivating a community**

There are many barriers to participation in an online community. The format is foreign to many people, and those that actively participate will always be a subset of the population that chooses to engage via this medium. We expect that many among our audience are comfortable and accustomed to communicating over email, and do not readily embrace posting their thoughts to a website. Our survey indicated that a popular feature would be to contribute to online discussions by replying to email (rather than posting that information directly on the website), but there are many challenges associated with this approach. Issues include determining the author and authenticity of a post (e.g. if an email is forwarded) and sharing of private information.

Another barrier expressed by several users, especially younger professionals and graduate students, is that they are reluctant to go on the record with their views or questions. As all content on the site has been attached to the member, there is an element of intimidation they experience that prevents their participation. Those who provide comments on the Soapbox, for example, typically display a higher than average degree of self-confidence. The changes to the rules about posting comments (discussed above) should address this concern by allowing comments from anonymous users or pseudonyms.

## **Funding**

It has been through federal support, with some matching contributions from Institute for Natural Resources, that Ecosystem Commons has been funded. Sustained agency contributions are uncertain. We suspect that the Commons is an unlikely candidate for foundation grants. We have yet to develop a financial model to sustain the Commons. Further discussion is provided in Appendix 2.

## **Soapbox**

The Soapbox is used as a platform for Ecosystem Commons members to post opinion-based articles that will generate conversations between users. Some have been more successful than others, of course, but overall the Soapbox is the primary feature that people associate with the site and one that should be sustained. The frequency of Soapbox posts and comments has declined. It has been difficult to recruit authors to contribute material.

# **Opportunities**

## **Software upgrade**

Ecosystem Commons is built with open-source software called Drupal Commons. Since Ecosystem Commons was built the underlying software has undergone significant revisions and upgrades. Migrating to the new version of the underlying software would yield a site with a more modern interface that is more visually appealing and more intuitive to navigate and use. The newer software offers better integration with social media and makes it easier to participate on the site by logging in with an existing Google, Facebook, LinkedIn, or Twitter account. Several other desirable features are also incorporated, such as the automatic re-sizing of the pages to fit on all types of devices, from phones to tablets and desktops. While the software itself is available at no cost, a consultant would be sought to perform the migration of existing users and content to the new platform, and further customizations to achieve the desired site.

## **Host events**

The activities of Ecosystem Commons do not need to be confined to the website. The Commons could take an active role convening and hosting events such as webinars to foster interactions between members of the community and provide additional venues for sharing and dialogue. This has the potential to be a very fruitful endeavor, but requires staff time to coordinate as well as willing presenters to contribute their time.

## **Social networking**

In an attempt to reach a wider audience, a more thorough social media campaign focusing on Facebook, LinkedIn, and Twitter was launched in November of 2011. Currently, the Facebook page has 35 Likes with 38.9 percent of users falling into the 25-34 age group. The LinkedIn site has 19 members. Twitter currently has 114 followers. While these numbers are modest, network referrals from social media sites, especially the LinkedIn page, have generated a substantial amount of traffic on the Commons site (Table 3). Increasing the presence of the Commons on these other channels seems a worthwhile strategy to developing the value of the Commons itself.

**Table 3.** Social media traffic sources for the period from 1/1/2012 until 12/31/2012

Social Network	Visits	% Visits
LinkedIn	736	68.02%
Twitter	136	12.57%
Blogger	91	8.41%
Facebook	90	8.32%
Other	13	2.68%

#### **Increased integration with ACES**

Ecosystem Commons and the ACES Conference could mutually benefit from a tighter integration. This represents an opportunity that merits further exploration. One idea is to use the Commons as the repository for ACES Conference abstracts and slide presentations.

## **Conclusion**

Ecosystem Commons has become a well-known entity to many working in the field of ecosystem services and is viewed as a valuable resource. The site provides a means for the community of ecosystem services professionals to discover and connect with colleagues, share developments in research or practice, share upcoming events, and engage in dialogue. We believe the site holds more potential value than is currently realized, and that further investment in the site infrastructure and staff can increase the value of the site to its 1000 members and many thousands of non-member users.

## APPENDIX 1. Ecosystem Commons Survey Results

Users of the Ecosystem Commons were surveyed from February 20 through March 30, 2012. During that period, 94 surveys were started and 73 surveys were completed. The response rate for completed surveys is approximately 11% of an estimated 650 registered members of the website.

---

### Question 1 Results



**Discussion:** answers may be biased towards more frequent users as they would have had additional opportunities to learn about the survey and may be more motivated to complete it.

### Actions:

1. Prioritize and implement website improvements
  2. Inform members of new website functionality as it becomes available
  3. Identify types of relevant content and sustainable methods for updating content
-

## Question 2 Results



**Discussion:** A nice spread of ages, including a good proportion of mid- and late-career users. Younger users are expected to be more tech-savvy and active in this digital arena. Results may be biased towards younger users as they may be more eager to complete a survey.

**Actions:** None

---

## Question 3 Results



**Discussion:** Well-balanced sector affiliations, good representation from all audiences

**Actions:** None

---

#### Question 4 Results



**Discussion:** Well-balanced level of responsibilities. The Commons has potential to include more students and technical staff.

**Actions:**

1. Reach out to students and teaching faculty
2. Offer features such as a job board that may attract students.

---

## Questions 5 Results

What do you hope to gain or achieve from participating in Ecosystem Commons?



**Discussion:** The size of words in the cloud indicate the frequency of use. Analysis reveals the following themes:

Frequency	Type	Concept (in order of frequency within types)
Very High (12 or more mentions)	Actions	Learning/Understanding (hear, glean, track, stay up to date)
	Targets	Knowledge (insight) Information News (trends, current events) Perspectives (ideas)
High (6-11 mentions)	Actions	Discuss (exchange, engage, communicate, dialogue) Collaborate (participate in community or groups) Network (connect) Share (news, info, work)
	Targets	Methods (skills, strategies, professional tips) Challenges/Solutions (re current issues in the field) Research Projects
Moderate (2-5 mentions)	Actions	Promote (self or expand reach)
	Targets	Community/People Publications/Literature

**Actions:**

1. Continue website development, with an emphasis on improving ease of user posts of perspectives, news, and information.
  2. Actively facilitate communication and collaboration on the Commons through revitalizing or creating new groups with identified leadership. Provide training and assistance on website use to those in leadership, management or coordination roles.
- 

**Question 6 Results**

I would visit the Commons more frequently if ...

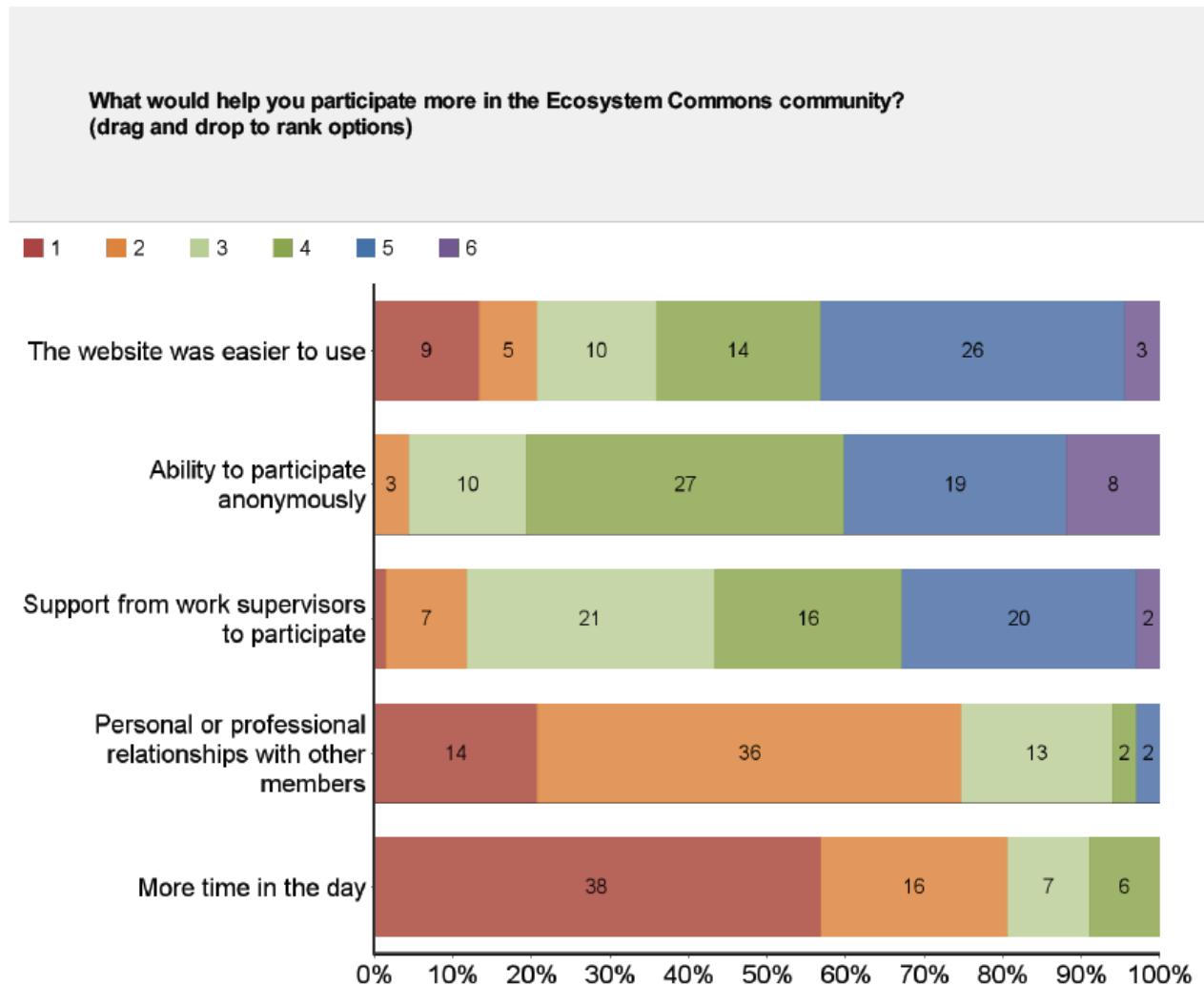


**Discussion:** The size of words in the cloud indicate the frequency of use. Analysis reveals the following themes:

Frequency	Type	Concept (in order of frequency within types)
Very High (12 or more mentions)	Personal	I had more time I already visit frequently
High (6-11 mentions)	Content	More and more diverse More practical/less theoretical (technical) Function

Moderate (2-5 mentions)	Personal	More related to my job
	Content	News oriented More active groups
	Function	I like/use email notifications Improved email notifications

## Question 7 Results



**Interpretation:** For this rank order question the more red tones in the bar (left side of the diagram) the more important the issue, the more blue tones (on the right side of the diagram) the less important the issue.

**Discussion:** It appears that time and relationships are the limiting factors for use of the Commons by a substantial margin. This question relates closely with Question 6 and the results should be considered

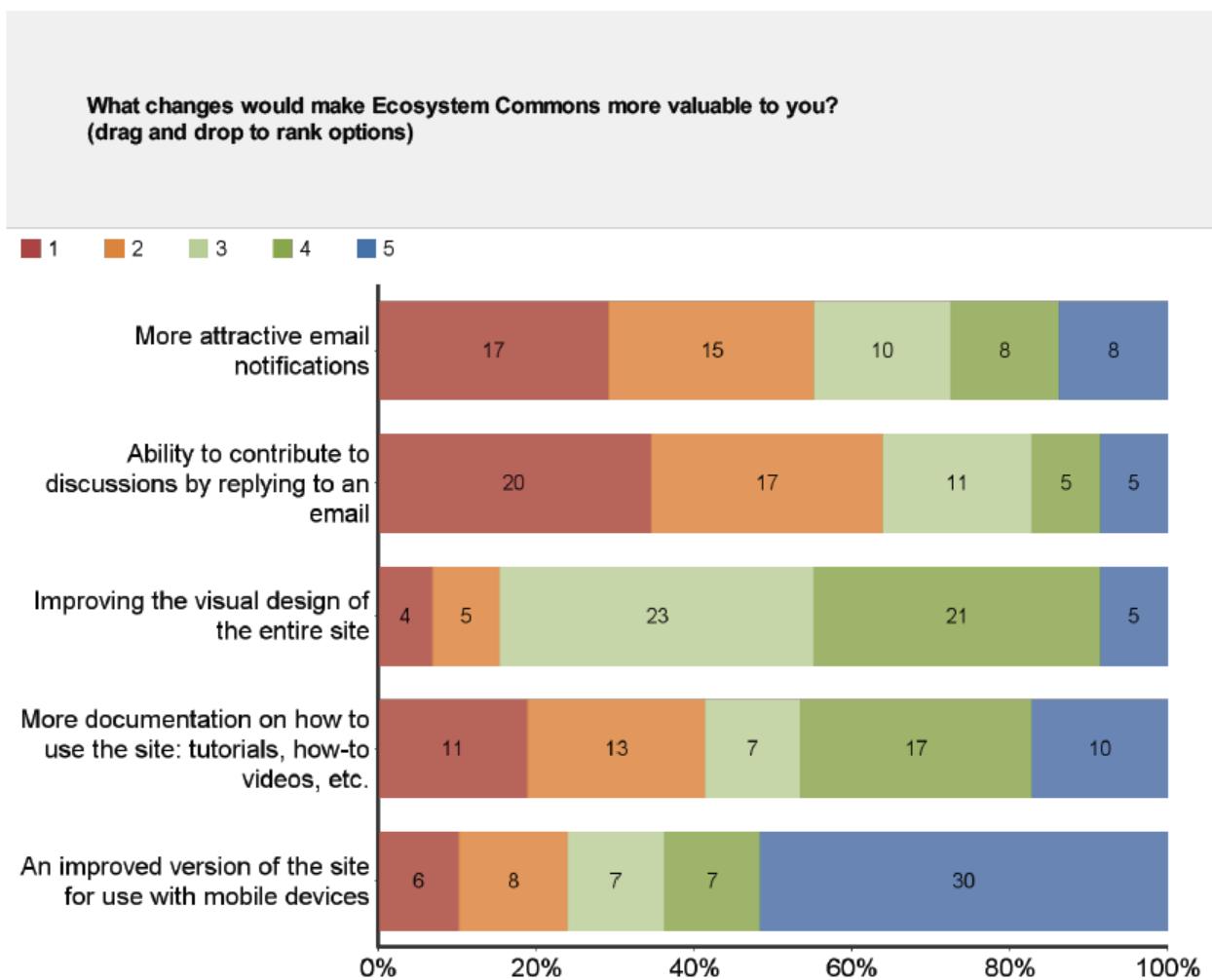
together. “Personal or professional relationships with other members” is linked to the need for the Commons to develop more interactive elements such as chats or webinars.

#### **Actions related to Question 6 and 7:**

1. Launch interactive elements such as live chats with Soapbox authors, educational webinars, or online workshops.
2. Help users learn to upload content.
3. Develop guidance or changes to the website that improve navigability and user ability to post information in the appropriate place.
4. Focus a larger portion of soapbox articles on practical solutions.
5. Provide guidance for users to complete user profiles.

---

#### **Question 8 Results**



**Discussion:** Email interaction with the website appears to be a major limiting factor. Additionally many users would like more instruction.

**Actions:**

1. Improve email notifications to include better formatting, more substantial content, more complete reference to originating group, and ability to respond directly from email.
  2. Update video tour of the website after changes have been made.
  3. Provide “how to” tips in broadcast email messages regularly to inform members of useful functions and ways to participate efficiently.
  4. Reduce overall complexity of the site to make clear where to post and where to find things. This may include removing some menu items, consolidating types of posts (such as discussions and documents), or removing inactive groups among other improvements.
- 

**Question 9 Results**

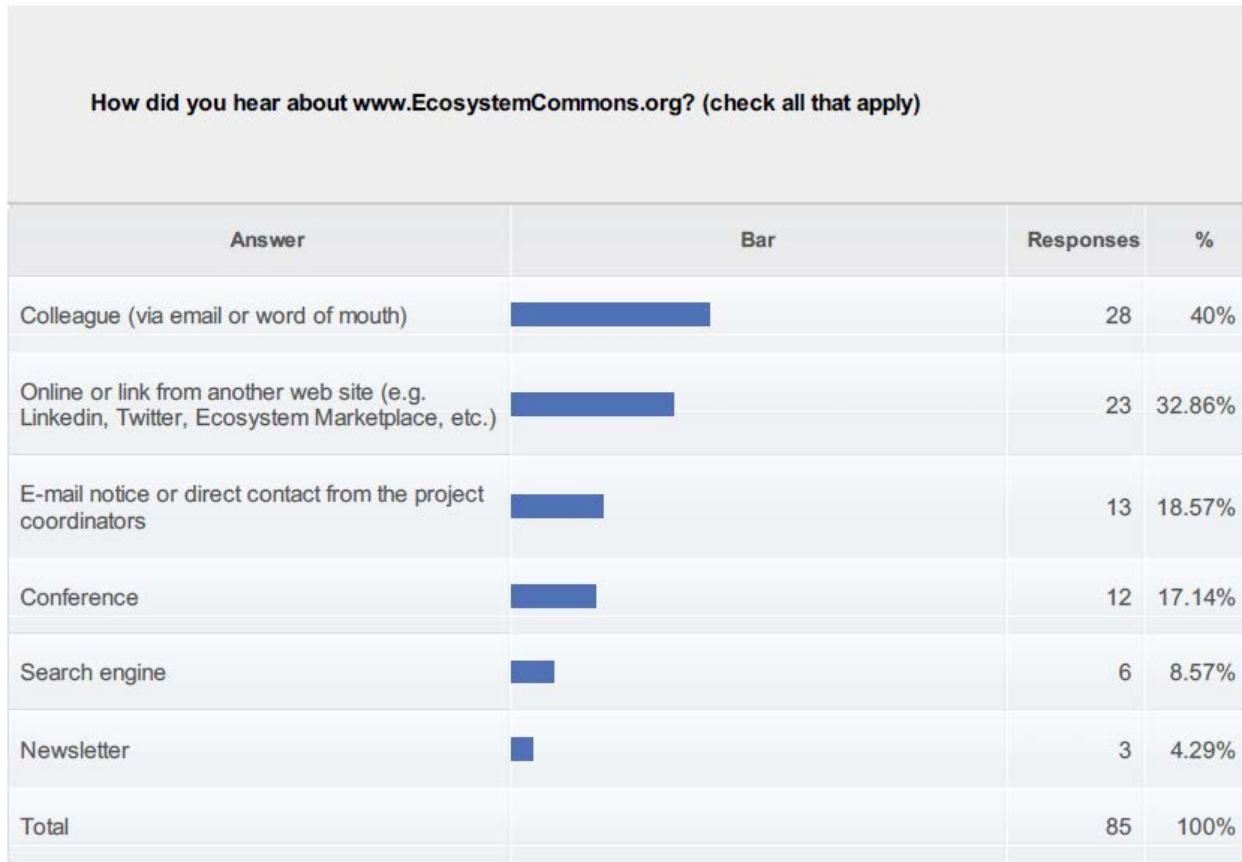


**Discussion:** Useful information about current uses of the commons. This may change over time.

**Actions:** None

---

### Question 10 Results



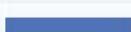
**Discussion:** This result is as expected.

**Actions:**

1. Continue presence on LinkedIn and Twitter, begin presence on Facebook.
  2. Integrate social media options into the commons (e.g. “like/share/post/tweet” on major social media such as LinkedIn, Facebook, Twitter, Stumbleupon...)
  3. Continue collaboration with Ecosystem Marketplace.
  4. Highlight the Commons at 2012 conferences on ecosystem services.
  5. Conduct search engine optimization process to improve rankings within search results.
-

## Question 11 Results

I use the following web media for professional reasons at least once a week (check all that apply):

Answer	Bar	Responses	%
LinkedIn		45	81.82%
Facebook		25	45.45%
Twitter		14	25.45%
Delicious		3	5.45%
Other		2	3.64%
Digg		1	1.82%
Reddit		1	1.82%
Stumble upon		0	0%
Technorati		0	0%
Newsvine		0	0%
Total		91	100%

**Discussion:** Answers may be biased towards active social media users who are more likely to use the Commons and complete a survey. More users than expected use Facebook for professional reasons.

### Actions:

1. Maintain Ecosystem Commons presence on LinkedIn and Twitter. Create an Ecosystem Commons page on Facebook.
2. Upgrade to a newer version of Drupal Commons or add modules that integrate use of other social media with the Commons (i.e. allow users to share content from the commons on media).



OSU | PSU | UO

**Corvallis (Headquarters)**

Oregon State University  
210 Strand Hall  
Corvallis, Oregon 97331  
541.737.9918  
[www.oregonstate.edu/inr](http://www.oregonstate.edu/inr)

**Portland**

Portland State University  
P.O. Box 751  
Portland, Oregon 97207  
503.725.9950  
[www.pdx.edu/inr](http://www.pdx.edu/inr)