

FIRMS Steering Committee Meeting
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FIRMS WEB TRENDS STATISTICS OVER THE PERIOD 2007-2016
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1. Web measurement basics

The current analysis of the FIRMS Web site is based on the Web traffic analysis generated by Google Analytics. Google Analytics is a free service provided by Google, it is browser based (a JavaScript counting events in a browser), and helps to analyse the way people access and use web sites. The following definitions have been extracted from Google Analytics help pages.

1.1 Page Views

The definition of page view is:

A page view is counted with the successful loading of any document containing content that was requested by a web site visitor, regardless of the mechanism of delivery or the number and frequency with which said content is requested.

Page views are the measurement of a visitor's interest in a site and they provide an easy way to convey the popularity of a page.

1.2 Sessions

A session is the period time a user is actively engaged with a website, app, etc.

It is used for measuring the amount of traffic a Web site gets. All usage data (Screen Views, Events, Ecommerce, etc.) is associated with a session. By default, a Google Analytics session lasts 30 minutes.

The notion of Session evolved from the concept of Visit which was counted when a unique visitor created activity on a web site, measured using sequential page views, regardless of the duration of this activity as long as the period of inactivity between page views does not extend beyond 60 minutes.

1.3. Bounce rate

The percentage of single-page sessions in which there was no interaction with the page.

A bounce is a single-page session on your site. In Analytics, a bounce is calculated specifically as a session that triggers only a single request to the Analytics server, such as when a user opens a single page on your site and then exits without triggering any other requests to the Analytics server during that session.

Bounce rate is single-page sessions divided by all sessions, or the percentage of all sessions on your site in which users viewed only a single page and triggered only a single request to the Analytics server.

These single-page sessions have a session duration of 0 seconds since there are no subsequent hits after the first one that would let Analytics calculate the length of the session.

1.4 Geographic location

How it is calculated and how reliable is it?

The country of origin of the access is calculated from IP address the user's computer is assigned when it connects to the internet - which may be fixed or dynamic. This is the IP address that is seen in the web server logs. Each IP address block is assigned by one of the regional internet registries to a particular country.

Google Analytics reports the country or territory from which visits originated, based on IP address of the visitor, which is mapped to a geographic region.

However, few conclusions can be drawn if the data says "US", "EU" or "unknown". If other countries are near the top then this can be considered interesting data. The data can be considered 95% accurate for other countries apart from the three mentioned above.

2. FIRMS Web trends (2007 - 2016)

2.1 Analysis of general trends

The analysis below is based on web traffic data provided by Google Analytics. This software was used to calculate various indicators from January 2007 to December 2016.

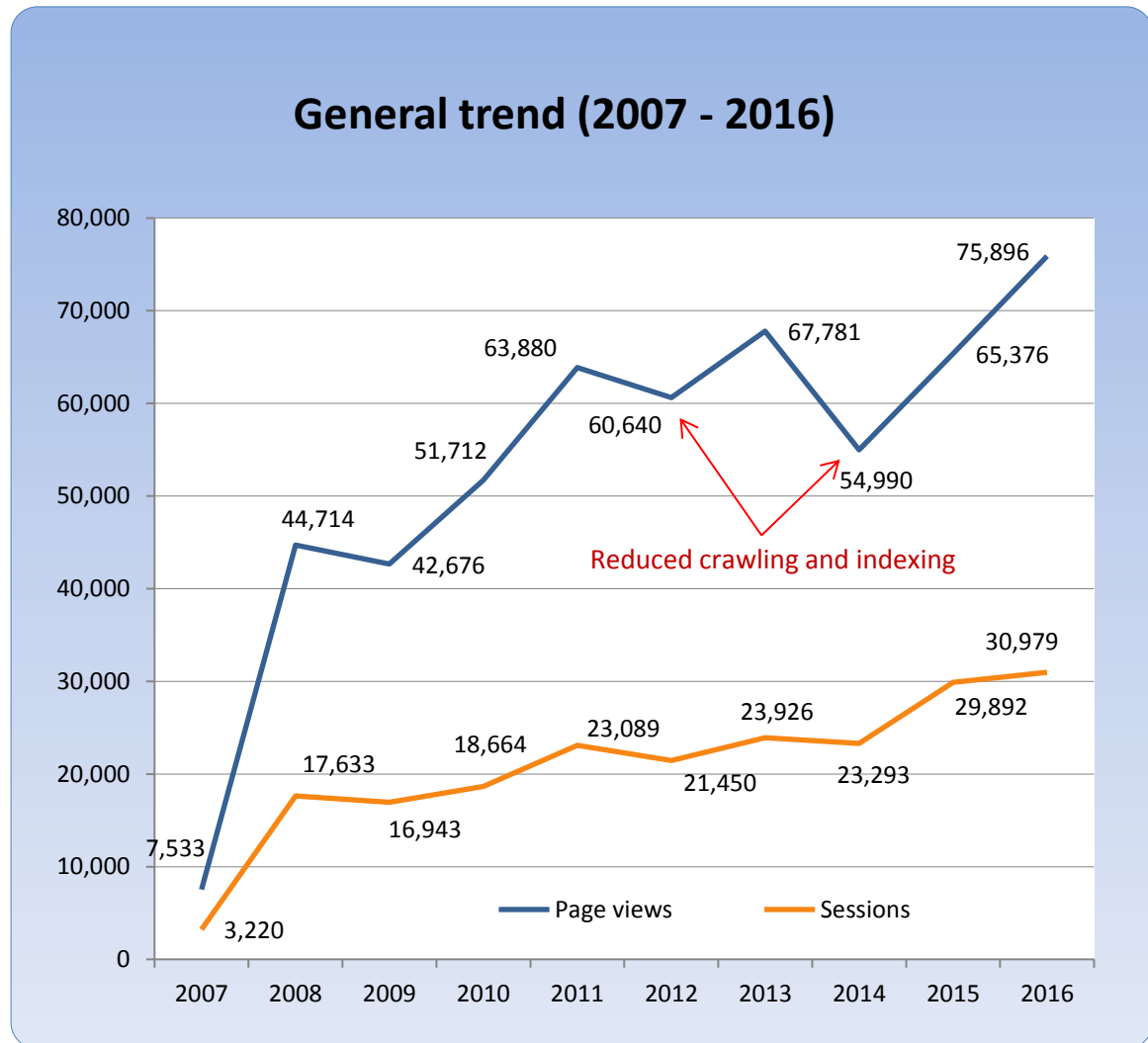


Fig. 2.1 FIRMS general trend (2007 - 2016)

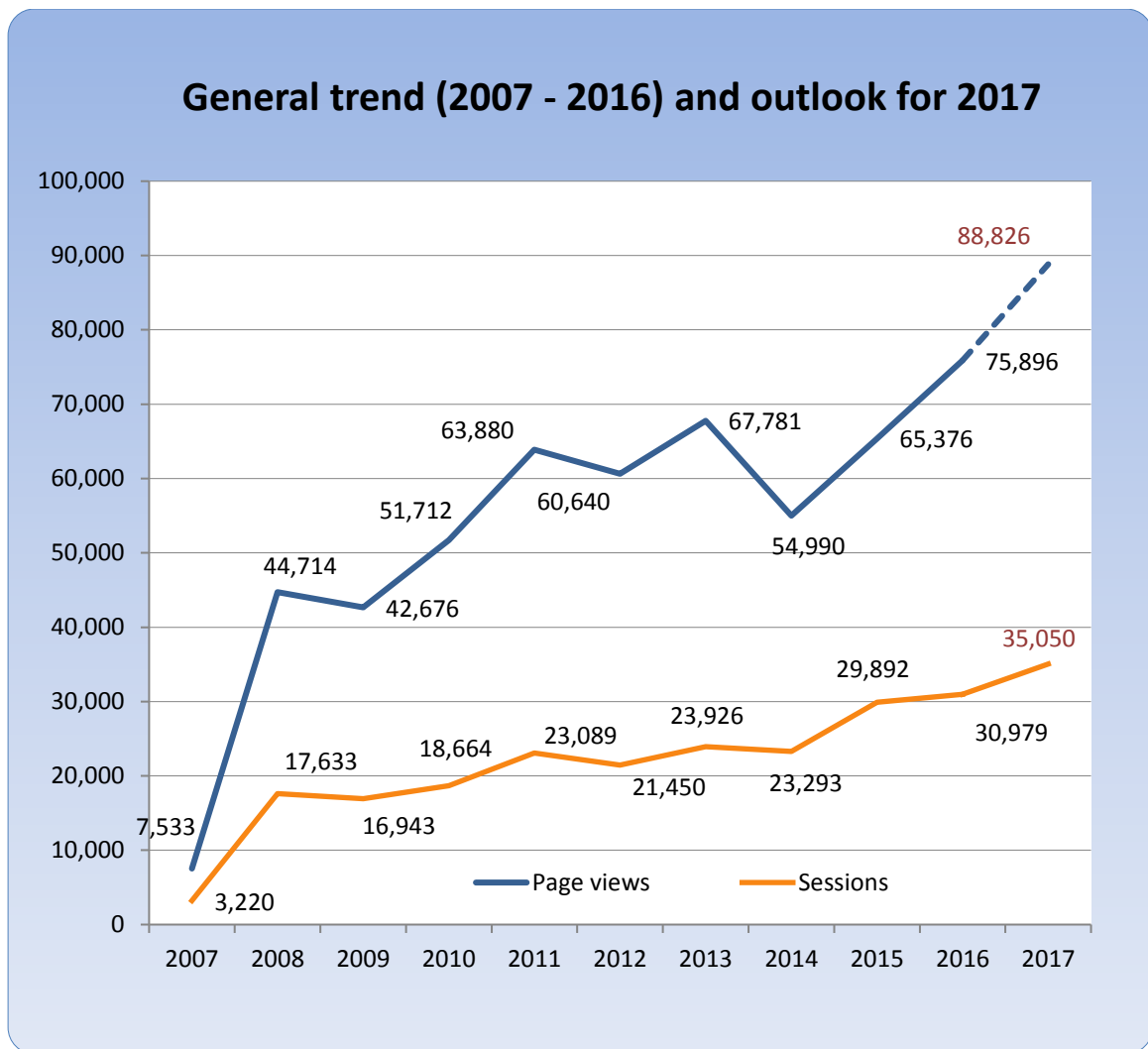


Fig. 2.2 General trend 2007-2016 and outlook for 2017 based on data from January to May 2017

Table 1: FIRMS general trend (2007 - 2016)

Year	No. Sessions	No. Page views	No. Pages/Months	Pages/Session
2016	30,979	75,896	6,325	2.45
2015	29,892	65,376	5,448	2.19
2014	23,293	54,990	4,583	2.36
2013	23,926	67,781	5,648	2.83
2012	21,450	60,640	5,053	2.83
2011	23,089	63,880	5,323	2.77
2010	18,664	51,712	4,309	2.77
2009	16,943	42,676	3,556	2.52
2008	17,633	44,714	3,726	2.54
2007	3,220	7,533	628	2.34

Figures 2.1, 2.2 and Table 1 show that the overall number of page views and sessions mainly increased through time. The upward trends of 2015 and 2016, and the outlook for 2017 (based on a simple extrapolation from the first five months January to May 2017), show an overall increase of the FIRMS usage, and also reflect the success of the actions taken to repair the technical incidents which caused reduced crawling and indexing activity in 2012 and 2014 (as described in the previous web trends report FSC8-FSC9).

The average bounce rate (the percentage of visitors who enter the site and leave it rather than continue viewing other pages) is about 67%. The bounce rate is about 50% for the home page and for the search interfaces; it is more variable for fact sheets with higher and lower values. In general a bounce rate less than 50% is considered good for further interactions with other pages of the website. But in case of fact sheets for which single-page sessions are expected, then a high bounce rate should be normal.

The average session duration (the average length of a session) 00:02:41 but with greater peaks in selected pages. In the previous analysis (2007-2014, reported in FSC9), the average session duration was 00:01:44.

These numbers suggest that the fact sheets (authoritative sources of information on status of fishery resources) trigger interest when users manage to access them.

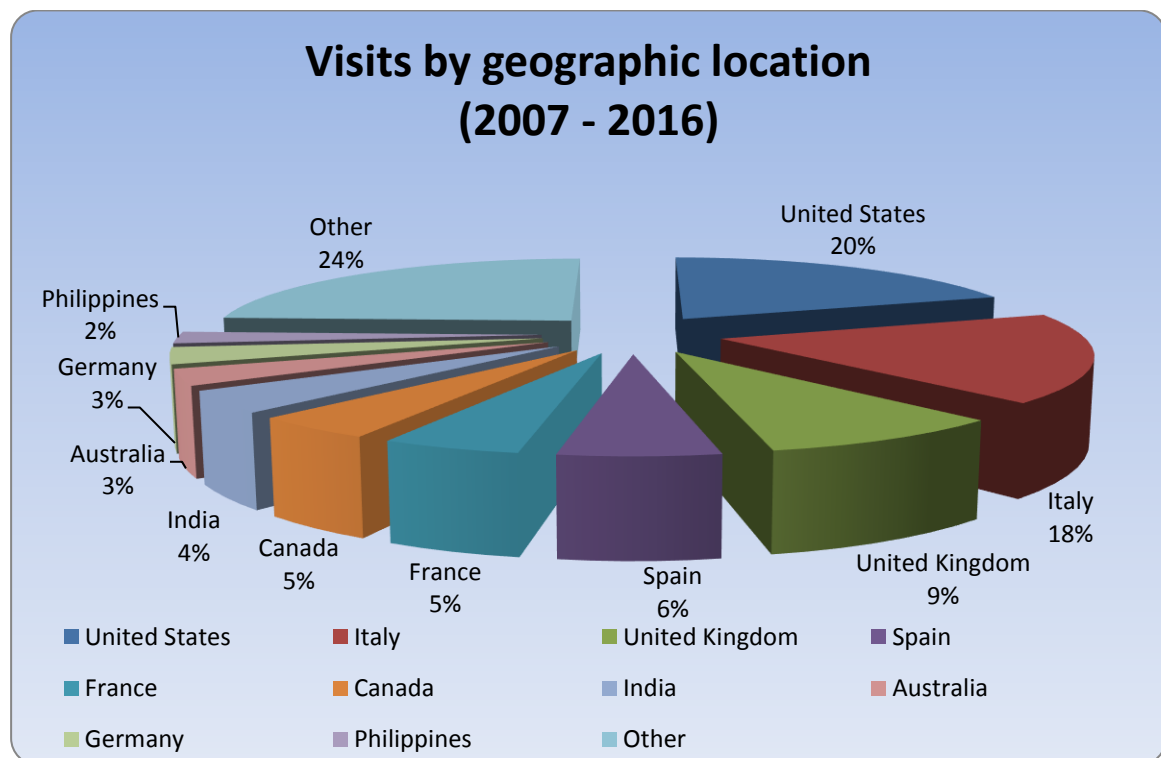


Fig. 2.3 Visits by geographic location (2007 - 2016)

Figure 2.3 describes the geographic location of the visits; the percentage is calculated upon a sample of 25 countries. The highest percentages of visits are originated by United States, Italy and UK. It should be noted that the figure for Italy may be inflated by the activity of the Secretariat which is regularly monitoring and updating the FIRMS site. The category "Other" includes (listed in decreasing order of importance): China, Portugal, Japan, Indonesia, Malaysia, Netherlands, Russia, Belgium, Norway and Mexico as top visitors among other countries.

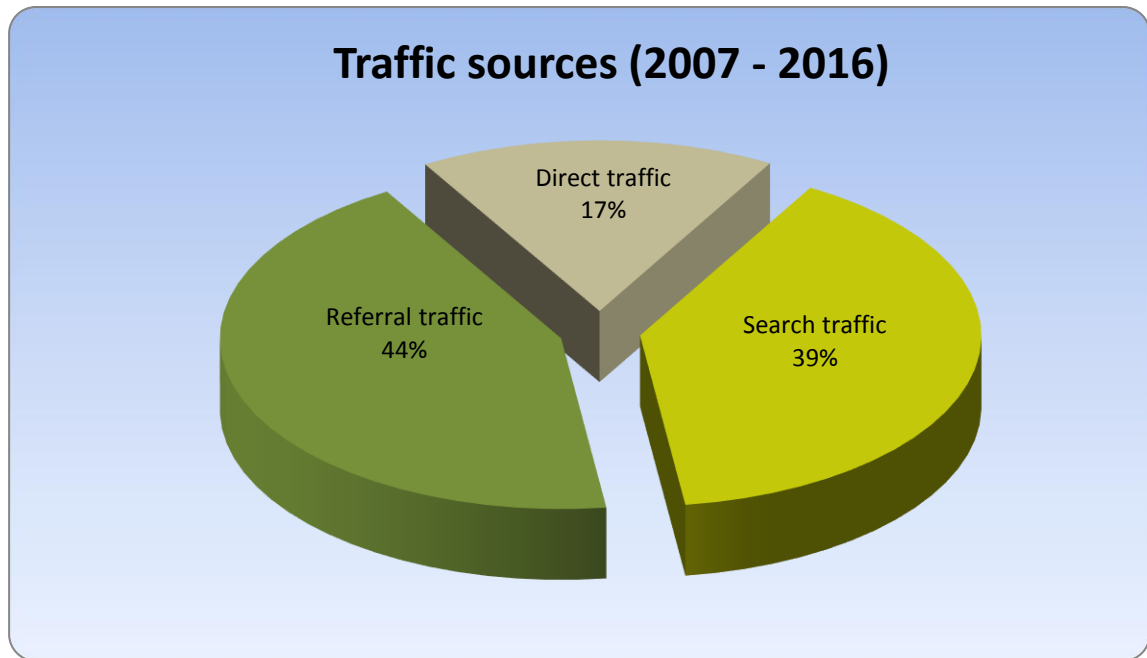


Fig. 2.4 Traffic sources (2007 – 2016)

Figure 2.4 shows that traffic sources for the FIRMS web site are generated mostly by search engines and by referral sites.

The majority of referral traffic (44%) is due to the following web sites (listed in decreasing order of importance): fao.org, fishbase.org, en.wikipedia.org.

Search traffic (39%) is mostly generated by Google search engine (more than 90%), followed by Yahoo, Bing and others.

Direct traffic (17%), visitors who clicked a bookmark or entered a URL, are the third way FIRMS is accessed.

In terms of device categories, an analysis for the period 2014-2016 indicated a growth of mobiles and tablets vs. desktop, respectively about 9% and 3% of the total sessions.

Top ten Marine Resource fact sheets (2007 - 2016)

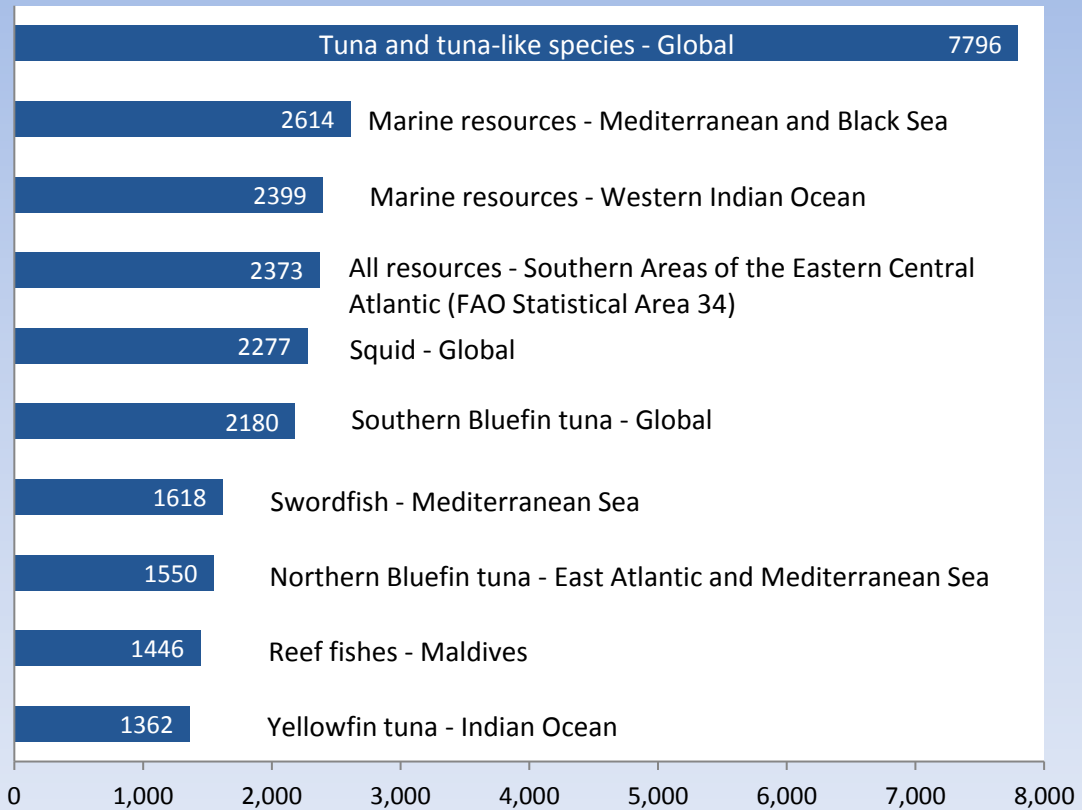


Fig. 2.5 Top ten Marine Resource fact sheets (2007 – 2016)

Figure 2.5 relies upon the total number of page views per Marine Resource fact sheets in the period 2007 - 2016. Just as in previous assessments, information on Tuna is considerably more requested (more than threefold higher) across considered years than other fact sheets.

Other top pages (such as Mediterranean and Black Sea, Southern Areas of the Eastern Central Atlantic, Squid, Southern and Northern Bluefin tuna, and Yellowfin tuna) remain among the most viewed. The Mediterranean Sea Swordfish and Reef fish in the Maldives are new to this list.

If the investigation is carried out only for the last 3 years (2014-2016), no major changes are observed among the top five marine resource fact sheets (with minor reshuffling). Other top viewed fact sheets for that period include: Swordfish - Mediterranean Sea, Reef fishes – Maldives, Northern Bluefin tuna - East Atlantic and Mediterranean Sea, and Marine resources - Northwest Pacific.

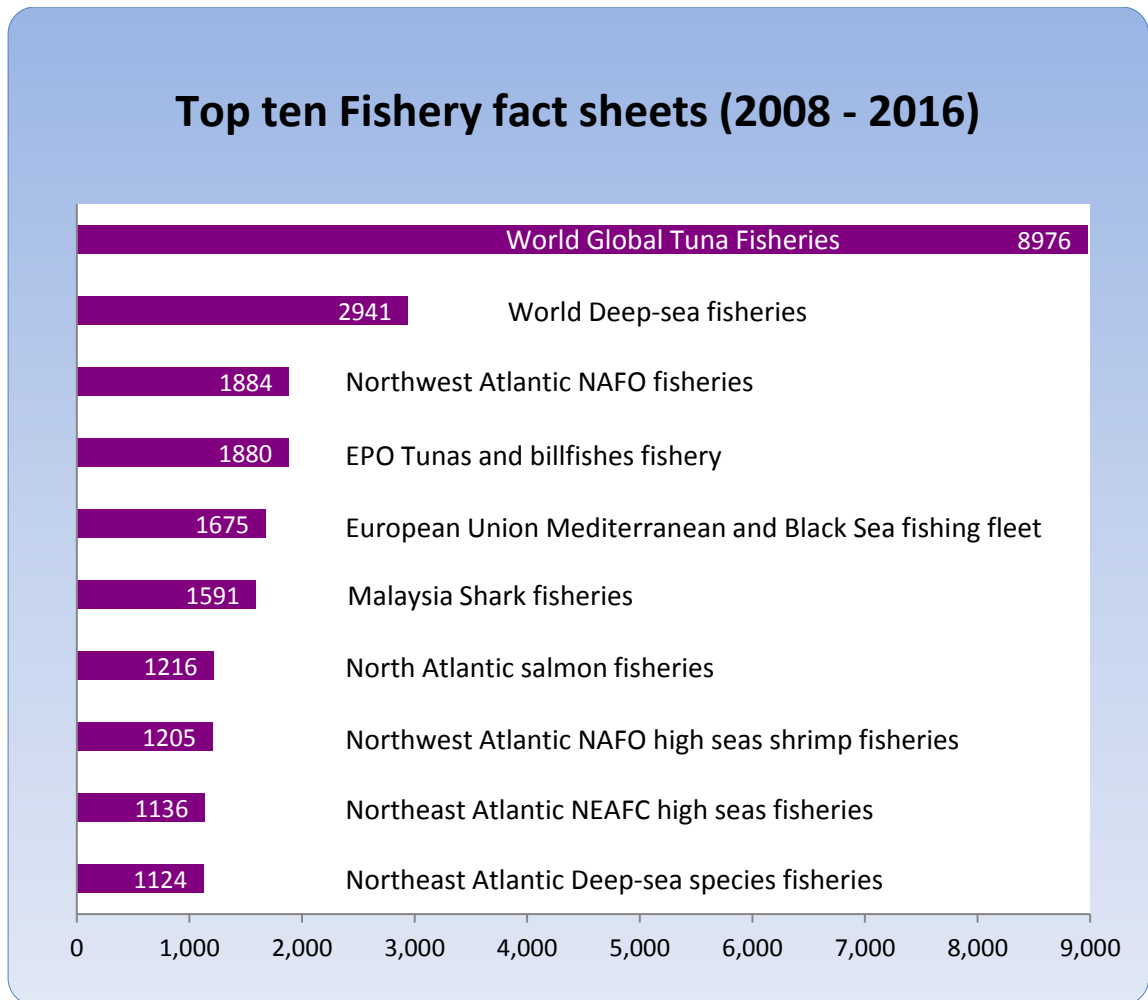


Fig. 2.6 Top ten Fishery fact sheets (2008 – 2016)

Similarly to figure 2.5, figure 2.6 shows the total number of page views per Fishery fact sheets in the period 2008 - 2016 and, as for previous years and as seen for the Marine Resource domain, the global information on Tuna is considerably more requested. Atlantic fisheries are particularly visited, however, compared to the previous years, where whiting, herring and mackerel fisheries were the most viewed, 2015 and 2016 has seen these overtaken by North Atlantic salmon fisheries, NAFO high sea shrimp, deep-sea species, and NEAFC high sea fisheries.

If the investigation is carried out only for the last 3 years (2014-2016), the global information on tuna and on deep-sea is still on top while the Mediterranean and Black Sea fishing fleet ranks at the third position followed by salmon fisheries and Malaysia Shark fisheries. Other top viewed fishery fact sheets for that period include: Pacific Islands Region Marine fisheries, NAFO high seas shrimp fisheries, Toothfish fishery - BANZARE Bank, and Thailand Sea cucumber fisheries.

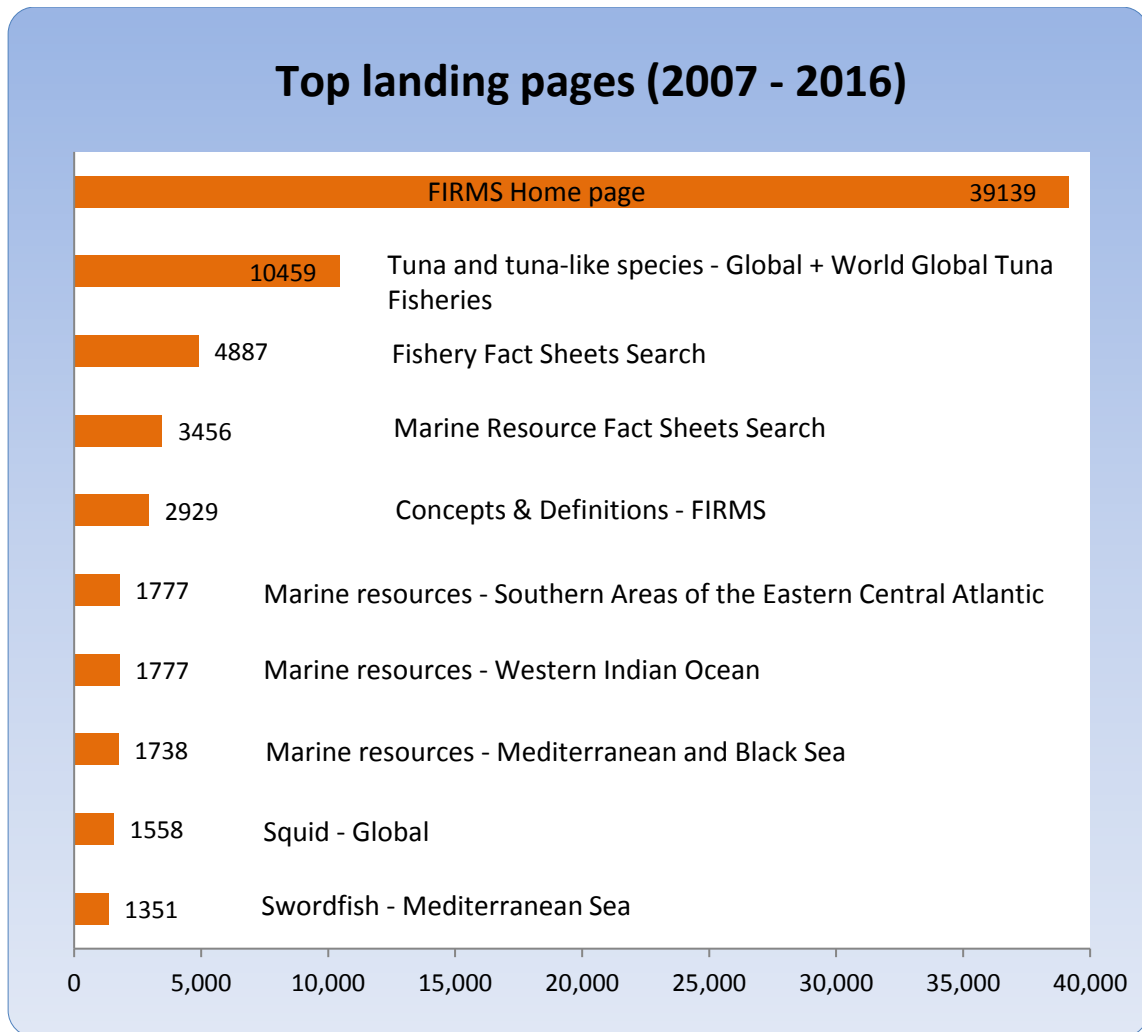


Fig. 2.7 Top landing pages (2007 – 2016)

Figure 2.7 shows the sessions per “landing” page, those pages which are accessed by users through textual links, banners or others references, including search engine results. The home page is still the main entry point, but in 2015 and 2016 it is followed by the tuna fisheries pages and the Fishery Fact Sheet search, which overcame the Marine Resource Fact Sheet search. Beyond the top five landing pages, the rest of the trends have remained very similar to the 2007-2014 review.

If the investigation is carried out only for the last 3 years (2014-2016), no major changes are observed among the top five landing pages (with minor reshuffling). Other top landing pages for that period include: the World Deep-sea fisheries, Marine resources - Western Indian Ocean, and the introductory page of the FAO Review of the state of world marine fisheries resources.

Consideration on keywords

Although further analysis is required, an initial assessment has highlighted that similar key words produce different ranking of FIRMS pages within the Google search results. For example, when searching by common species name and area (e.g. “Orange roughy Atlantic” or “Orange roughy South Pacific”), FIRMS Marine Resource and Fishery fact sheets are displayed in the first Google results page, while when only the species name is entered, other websites are more visible. On the contrary, less popular key words (e.g. “Deep-sea red crab”, “tuna-like”) place FIRMS among the first results. It was also observed how FAO domain pages were often ranked higher than FIRMS. The possible migration of FIRMS under FAO.org should result in an increase of the overall web trends.