

## Small pieces loosely joined: getting louse research online

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We describe the architecture and template design of “Scratchpads”, a data-publishing framework we have developed as part of the European Distributed Institute of Taxonomy (EDIT). This system enables distributed groups of researchers to create their own social networks supporting biodiversity science.

Using the louse Scratchpad (<http://phthiraptera.myspecies.info/>) as an example, we demonstrate how the Scratchpads system can cater to the particular needs of different research communities though a common database and system architecture. This is flexible and scalable enough to support multiple networks, each with its own choice of features, visual design, and constituent data. Automated annotation and indexing is applied to all content, allowing users to navigate intuitively and curate diverse biological data types. This includes content drawn from third party resources, helping to ensure that mobilized data is effectively curated. The louse Scratchpad contains extensive data on louse classification, host parasite associations, images, fora and bibliographic information from a wide variety of sources, providing access to thousands of PDF reprints. It is illustrative of similar Scratchpads for supporting the efforts of other research communities, enabling them to bridge the social, technical and policy barriers that hinder biodiversity data integration. The Scratchpad framework (<http://scratchpads.eu/>) currently serves more than 1,500 registered users across 153 sites, spanning scientific, amateur and citizen science audiences in more than 30 countries. These users have generated more than 145,000 pages of content in the first three years of use.

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