MID-TERM ACTIVITY REPORT

BIFA3_23 - Biodiverskripsi

Guidelines on how to complete the activity report are included in italics.

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Executive summary

Provide a brief explanation of the context and the approach taken for the mid-term evaluation, and a summary of the main conclusions, lessons learned and recommendations for the remaining project period.

Biodiverskripsi mid-term evaluation were conducted based on several objectively verifiable indicators that we planned on providing on our project proposal. These are mainly the deliverables of the project, such as the existing sampling-event data resulting from student theses, data enumeration protocol, catalogue of transcribed theses, custom web-based information system, and manuscript draft for the planned data paper. Additional reflection on project implementation, feedback from stakeholder, and overall evaluation narrative of project activities and outputs are also provided along with successes to build on for the rest of the project term.

On the mid-term of our project on September 2018, our seven transcribers managed to digitize approximately 3,000 occurrence records from 28 theses from three universities, distributed among the four planned data set. This is around 16% of our targeted occurrence records of 19,000 and still subject to change as we have not clean and validate the data yet. To increase this figure, we are working to develop a more efficient protocol, accelerate the collaboration agreement process for universities not yet signing the agreement, and promote a more effective working approach for the student helpers. Meanwhile, the development and evaluation of custom web-based information system was delayed due to changes in the feature we requested.

Although most of our activities planned to be finished on mid-term are delayed, we are working to keep the rest of the activities on schedule according to our project timeline by making several adjustments. These adjustments include conducting several activities simultaneously, recruit additional student helpers and operational team members, re-arrange team job description and re-distribute tasks, and re-arrange our budget to meet the adjustments. Therefore, for the remaining project period, the activities to achieve the three major goals of our project at the end of our project term were currently implemented simultaneously instead of subsequently with a modified budget plan.

Contact information

Please provide the name, institutional affiliation, role in the project and contact details of the author(s) of the report.

Sabhrina Gita Aninta
Tambora Muda Indonesia
Biodiverskripsi Project Coordinator

Introduction

This section should explain to readers what they will find in this report. It should include:

- *A description of how the evaluation has been carried out (e.g. consultation or surveys with project partners and participants). Please refer to the description of monitoring and evaluation plans in the original project proposal.*
- *A description of how the project partners will use the evaluation results.*

This report contains progress made by “The Biodiversity Theses Database Project”, hereafter referred to as “Biodiverskripsi”, from the beginning of the project on April 2018 to September 2018. According to our monitoring and evaluation plan in our original proposal,

we intended to evaluate Biodiverskripsi around its major goals, which are (1) attaining ecological data from student theses, (2) developing custom web-based information system to share the data, and (3) assessing the quality of student research related on biodiversity assessment.

We assigned several objectively verifiable indicators and evaluate our goals around those indicators with the help of means of verification provided in the Annex at the end of this report. For our first goal, the indicators are (1) the existence of biodiversity information in the form of sampling event data according to GBIF standard and (2) an agreed protocol to reproduce the information are our base of evaluation. We will provide the number of theses compiled until 20 September 2018, the percentage of species that had been studied relative to the total number of species in each taxon, and the frequency of various type of ecological research. This information was based on the report made by the enumerators, the existing sampling event data transcribed by the student helpers, and the current available protocol for enumerating student theses data.

For our second goal in making a sustainable platform to publish the resulting sampling event data, we intended to base our evaluation on (1) the existence of a custom web-based information system to store the resulting sampling event data and (2) its evaluation. As the structure of the information system is still under discussion nonetheless, this evaluation is not yet available in this mid-term report.

For our third goal to assess the states of quality, discovery, accessibility, and archiving of student theses conducting biodiversity assessment, we intended to base our evaluation around the progress in making a manuscript draft containing analyses of the transcribed data.

In addition to the mentioned indicators, we will also provide a reflective evaluation of our project including the quality of the deliverables, timeliness of our project, effectivity of project implementation, budget compliance, and stakeholder feedback. This type of evaluation has been achieved by routine correspondence with project stakeholders and in-house discussion group within Tambora Muda Indonesia.

Project partner and stakeholders may use this report to assess their contribution to overall deliverables so that they could adjust their current management and approach in Biodiverskripsi. Description on the workflow, justification for changes, the challenges we met during the implementation of the project according to the proposal, and how we address the challenges will be useful for project partners and GBIF community as a base to held similar project in the future.

The project and its objectives

A brief summary of the project to help readers understand its objectives, including, for example:

- *The project's start date and expected duration*
- *A list of project participants and description of the main stakeholders*
- *The targeted capacity needs as outlined in the project proposal*

Biodiverskripsi has been started from 1st of April 2018 and expected to end at 31st of March 2019. This project objective is to make biodiversity-related researches produced by early research training in Indonesian higher education integrated nationally and form a substantial source for global biodiversity research. To reach this objective, Tambora Muda Indonesia set three major goals which were implemented in several activities with relevant stakeholders.

The main stakeholders for this project are Tambora Muda Indonesia and InaBIF staffs as institutional stakeholder, Biodiverskripsi operational team organized within Tambora Muda Indonesia as project stakeholders, and Ikhwan IT—sub-contracted web developer—as external stakeholder. The participating universities answering our invitations are Universitas Sumatera Utara (USU), Universitas Gadjah Mada (UGM), and Universitas Papua (UNIPA). Additionally, a group of students from Institut Pertanian Bogor (IPB) and Universitas Indonesia (UI) also willing to conduct independent research to contribute occurrence records to Biodiverskripsi.

The three major goals of this project are (1) ecological monitoring data from student theses of at least five Indonesian universities produced in 2000-2017 collated in the form of sampling-event data as an integrative format that could be used internationally, (2) a sustainable platform to assist the process of sharing and publishing biodiversity data from student theses in sampling-event data format created to fit the need of Indonesian scientific community, and (3) the states of quality, discovery, accessibility, and archiving of student theses conducting biodiversity assessment produced in 2000-2017 from at least five universities from all over Indonesia compiled.

We held two workshops to ensure that we have **the targeted ecological data from student theses in sampling-event data format**. The first workshop was under the framework of kickoff meeting with potential university partners to discuss Biodiverskripsi implementation in respective universities. The second workshop was to ensure the ability of our student helpers to transcribe data from student theses to sampling event data following Darwin Core standard. Meeting with experts to discuss review mechanism to address data cleaning and publishing of the resulting transcription was conducted in informal settings routinely to add to our transcription protocol.

To have the data shared, we conducted in-house discussion to **develop a custom web-based information system** and arrange procedures for its evaluation to ensure its usability. This is also a part of improving InaBIF data portal, a platform initially established by Indonesian government to collate species records nationwide as an independent information system, as changing InaBIF within its current information system at its institutional server would need a complicated bureaucracy. We planned a workshop for analyzing data from the web portal after the mid-term and a closing conference to further promote our web-based information system and biodiversity informatics in general. Additionally, in-house discussion between Biodiverskripsi operational team and university partner to discuss the framework for **our manuscript about assessing the states of quality, discovery, accessibility, and archiving of student research related to biodiversity assessment** is on schedule.

Activities

Please indicate the status of the activities as outlined in the project proposal. The table below should be completed in the same way as in the full proposal but should include information about the status of the activity.

Description of activity	Partners involved	Contribution of activity to goals listed in table 4.3	Status of activity as of mid-term reporting
Mobilizing species occurrence and sampling-event data from observation networks and monitoring systems			
Kickoff meeting with at least 10 universities and other stakeholders	Tambora	Promote project and increase data input (Goal 1 and 2)	Completed with five universities
Theses bibliography sorting	Tambora	Assisting data enumeration (Goal 1)	Ongoing
Meeting with experts to discuss review mechanism	InaBIF, Tambora	Addressing the problem of various data quality (Goal 1)	Ongoing
Develop data enumeration protocol guidebook	InaBIF, Tambora	Assisting data enumeration (Goal 1)	Ongoing

Workshop on data enumeration	InaBIF, Tambora	Assisting data enumeration (Goal 1)	Completed
Data enumeration	Tambora	Ecological monitoring data available (Goal 1)	Ongoing
Preparing data papers			
Workshop for analyzing data from data portal	InaBIF, Tambora	Increase data use (Goal 2)	Delayed
Data paper preparation and submission	InaBIF, Tambora	Evaluate data set (Goal 3)	Ongoing
Other activity types			
Construction of custom web-based information system	InaBIF, Tambora	Create sustainable platform for data sharing and publishing (Goal 2)	Ongoing
Evaluation of custom web-based information system	InaBIF, Tambora	Create sustainable platform for data sharing and publishing (Goal 2)	Delayed
Closing conference	InaBIF, Tambora	Increase data use and evaluate project (Goal 2 and 3)	On schedule
Communicate project to national audience for wider awareness	InaBIF, Tambora	Increase data use and evaluate project (Goal 2 and 3)	Ongoing

Deliverables

This section should summarize the project activities completed by the mid-term, with a description of the associated outputs and deliverables. Please highlight any changes from the original plans provided in the full project proposal.

If no result has been achieved on a specific point, please indicate it as "no result achieved yet".

a. Data

Details of datasets expected to be mobilized as an outcome of the project:

Title of dataset	Taxonomic/geographic scope	Approximate number of records (specimens)	Current format (e.g. undigitized, digitized)
Higher-Plants of Indonesia	Embryophyta/Indonesia	~750	Digitized
Vertebrates of Indonesia	Chordata/Indonesia	~700	Digitized
Marine Life of Indonesia	Echinodermata, Hemichordata, Cnidaria, Ctenophora, Mollusca, Porifera, Arthropoda, Mollusca, Actinopterygii, Sarcopterygii/Indonesia	No result achieved yet	NA
Freshwater Invertebrates of Indonesia	Phytoplankton, Zooplankton, freshwater Arthropods, Ecdysozoa, Lophotrochozoa/Indonesia	~1200	Digitized
Terrestrial Invertebrates of Indonesia	Arthropoda, Annelida, Mollusca, Nematoda/Indonesia	~490	Digitized

b. Other deliverables

Describe other deliverables expected from the project (e.g. publication of data papers, catalogues, reports etc.)

This project will also publish several taxon-specific analyses in form of a data paper in addition to our mandatory progress report. The data papers will report the current state of biodiversity information, ecological condition of a region, and species occurrence data as the result of this data collating, along with identifying other important gaps to be addressed. A catalogue on transcribed theses will be provided to accompany the data set. A guidebook on transcription protocol in Indonesian language is on preparation as an additional deliverable. Several infographics and simple video of the project progress will also be made for documentation and national awareness.

Calendar of activities

The calendar should be completed in the same way as in the Full Project Proposal (4.6) but should include any expected changes. Please provide reasons for any expected changes in the Notes column in the table below.

Date	Event	Lead partner	Notes
April-May 2018	Kickoff meeting with at least 10 universities and other stakeholders	Tambora Muda Indonesia	Completed in 2nd of July with 5 universities. Delayed because of national vacation terms and slow response from the invited universities.
May 2018	Theses bibliography sorting	Tambora Muda Indonesia	Ongoing due to administrative reasons. This activity is now incorporated in data transcription period.
May 2018	Meeting with expert to discuss review mechanism	Tambora Muda Indonesia	Ongoing. A periodic long-distance consultation has been conducted instead of a formal one-time meeting to address the growing challenges in transcribing data
May-June 2018	Develop data enumeration protocol guidebook	Tambora Muda Indonesia	Ongoing due to growing challenges in standardizing theses data
June 2018	Attendance of project team member at BIFA Capacity Enhancement Workshop	Tambora Muda Indonesia	Completed
June 2018	Workshop on data enumeration	Tambora Muda Indonesia	Completed in August 2018
July 2018-March 2019	Communicate project to national audience for wider awareness	Tambora Muda Indonesia	Ongoing as scheduled
July 2018	Construction of custom web-based information system	Tambora Muda Indonesia	Ongoing due to changes in data structure and requested features, expected to be completed on December 2018.
Agustus 2018	Evaluation of custom web-based information system	Tambora Muda Indonesia	Delayed due to delay in the construction of the web-based information system, expected

			to be completed on December 2018
June-September 2018	Data enumeration	Tambora Muda Indonesia	Delayed to September-December 2018 due to delay in university responses to collaborate to access the theses and publish the ecological data.
October-December 2018	Data paper preparation and submission	Tambora Muda Indonesia	Ongoing, extended to February 2019 as data were not available yet
October 2018	Workshop for analyzing data from data portal	Tambora Muda Indonesia	Delayed to January 2019 as the custom web-based information system and the transcribed data were not available yet
March 2019	Closing conference	Tambora Muda Indonesia	On schedule

Project communications

Describe the plans to communicate and share the results of your project with the project stakeholders and broader GBIF community. Please also review the page describing your project available from https://www.gbif.org/project/lbJtcnYiuykmyWWQWI4I2/the-biodiversity-theses-database. Highlight any additional documents, events, news items or links that you would like to add to your page.

Tambora's social media are quite well-known among conservation scientists and biologist in Indonesia, with 6991 Instagram followers, 3307 likers with additional 30 followers on Facebook, and 255 followers on Twitter (per 25 September 2018). These media are effective platforms to communicate the progress of this project to a wider range of audience and our project has gained positive responses via these social media.

Regular update of project activities has been routinely conducted to our stakeholders—Biodiverskripsi team, InaBIF, and partner universities—using instant messaging apps and e-mail. Any formal documentations that we produced (e.g. protocol guidebook, workshop slides, data paper draft, etc.) were, are, and will be distributed to all stakeholders.

Regular updates will also be given to our network of invited universities which has not positively responded to our invitation yet in our hope to increase awareness in biodiversity data publishing. This will be effective when conducted in collaboration with InaBIF, or

specifically LIPI, as Indonesia's scientific authority. The inclusion of national research institution will hopefully increase the impact of our awareness and the inclusion of our database in national research and policy making.

To share our results to broader GBIF community, we seek to routinely update our project page in GBIF website and mention GBIF account while sharing our project activities in social media. Bilingual promotion was challenging nevertheless, and we are still working on how to best keeping international community up to date with our project and later our data set. The project page will be updated with images relevant to our project description, and representative visual depiction of our activities and objectives for our project page along with updates in our activities are yet to be proposed to BIFA Coordination Team.

Mid-term evaluation findings and recommendations for the remaining project implementation period

This should be the main section of the report, covering for example:

- *An evaluation of the project activities by the mid-term and their outputs/deliverables*
- *Any feedback on the project's relevance from the partners and stakeholders*
- *Comments on the project implementation, its efficiency and effectiveness*
- *The management arrangements for the project, including support from the GBIF Secretariat*
- *Any reflection on the mid-term evaluation itself that could help inform the project's final evaluation and final report*
- *Areas of success to build on during the remainder of the project implementation*

This section is also an opportunity to draw out the main lessons from the project experience that could be applied in other contexts, including any best practice that others in the GBIF community could apply.

Try to clearly document any changes to the project plans that will be made based on the findings of the mid-term evaluation. Please discuss any substantial changes with the GBIF Secretariat (bifa@gbif.org). In addition, please outline any recommendations for the GBIF Secretariat or the community to reinforce the initial successes of the project.

Evaluation of project activities by the mid-term

In achieving our first goal, we managed to conduct a kick-off meeting with five universities, a workshop for data transcription to train student helpers and operational team to transcribe data independently, and proceed to data transcription phase. Theses bibliography sorting, meeting with experts to discuss review mechanism, and the development of data transcription protocol guidebook is still ongoing due to new challenges met during data transcription workshop and the following transcription period.

Kick-off meeting with universities

The delay in some activities was mostly due to the delay in kick-off meeting with potential partner universities. Although we have started our correspondence with ten potential partner universities before April 2018, only five universities actively respond to our correspondence and agree to attend the kick-off meeting which we arrange in a form of workshop on 2nd of

July 2018. In this workshop, a draft of collaboration agreement in form of memorandum of association (MoA) from Tambora as requested by two of the five participating universities was discussed and follow up schedule to sign an MoU and the MoA was arranged. From the five universities attending the workshop, IPB declined a collaboration request, UGM has signed this MoA, and USU will sign this around the beginning of October 2018. UI and UNIPA requested more time to discuss the project implementation.

Due to project timeline, we focused to accommodate collaboration with these five universities and did not add more universities. These universities have the largest number of relevant theses titles based on our preliminary assessment and we are optimistic that these five universities could provide the necessary number of relevant theses to achieve our overall targeted number of 19,000 occurrence records. The delay in coming to an agreement with the universities, however, demanded us to adjust our enumeration effort by adding more student helpers and requesting operational team to join the enumeration.

Theses bibliography sorting

Among the five universities that positively respond to our invitation to collaborate within Biodiverskripsi, three have not completed the digitization of their theses' repository information yet. Thus, the theses bibliography sorting has not finished yet. This activity is now incorporated to data transcription activity instead of standing as independent activity as part of the agreed protocol.

Meeting with experts to discuss review mechanism

We have requested an audience with the Head of Research Center for Biology LIPI to invite LIPI joining Biodiverskripsi as data reviewer but we have not achieved a schedule with relevant LIPI officials since we requested it on June 2018 up until now. To ensure the quality of our data, we resort to other means of data validation for our data set, ranging from reviewing theses quality to informal consultation with LIPI taxonomists. We also invited three LIPI researchers and one IPB researcher to our data enumeration workshop on 15-18 August 2018 to have them point out the usability of the transcribed data from student theses and concerns in using data from student theses. This activity thus is still ongoing as this kind of consultation will be necessary until shortly before data publishing.

Develop data enumeration protocol guidebook

Our protocol guidebook basically translates best practice in publishing sampling event data to Indonesian language for people who will transcribe data from theses based on the trial effort of Biodiverskripsi operational team. Nonetheless, the data enumeration workshop ended up emerging new point of view on how to transcribe the data and each thesis end up possessing unique problem when we seek to transcribe its content to sampling-event data

following Darwin Core standards. We are in the middle of adjusting our approach and this guidebook has yet to be finished.

This changes our budget line for final booklet as we could not print any yet. For efficiency, we decided to not printing the booklet and use the budget to made a team polo shirt instead to motivate Biodiverskripsi operational team, student volunteer, and university coordinator. Based on Tambora in-house discussion to make team work more rigid, t-shirts were an effective means to increase project participant's dedication and sense of inclusion in the team to further increase working efficiency. The booklet containing data enumeration protocol will instead be distributed digitally as one of our deliverables of Biodiverskripsi project.

Workshop on data enumeration

The workshop for data enumeration was conducted for four days (three days effective) from 15th to 18th of August 2018. This workshop was attended by a total of 19 participants, 10 volunteers, 1 university coordinator, 5 members of operational team, and 4 members of Tambora. This workshop aimed to enable participants to do data transcription from theses to sampling-event data independently, following Darwin Core terms. Sample theses from each of targeted data set that have been transcribed by Biodiverskripsi operational team were provided for training. We delivered materials about data mobilization, data publishing, and data transcription acquired from BIFA Capacity Enhancement workshop, while allowing the students to try transcribing the sample theses themselves based on the delivered materials.

From the resulting discussion, there were still a lot of misunderstanding and confusion on the definition of terms required in the sampling-event data template. Some terms were not familiar for students, and assessing different kinds of reports to transcribe means meeting different forms of sampling protocols and results that needs to be interpreted in the same manner. As a result, new point of views from the many student helpers in viewing the sampling-event data template fields and how the theses could be transcribed demanded us to adjust the protocol we believed to be finished.

Up until now, new questions still arise with each new thesis they transcribe during data enumeration period, demanded us to improve our reviewing and communication protocol for the rest of the period. One of the changes implemented based on this workshop is the change of data set from "Arthropod" to "Terrestrial Invertebrate" to accommodate other phyla of terrestrial invertebrate collected and extending the taxonomic groups within "Marine Life" data set.

Data enumeration

Table 1 provides a summary of the number of theses transcribed until 20 September 2018 (starting around the last week of August 2018). We did not provide occurrences transcribed per student as their work still need cleaning (e.g. non-standardized occurrenceID, etc.). The types of ecological researches documented in these theses vary with approximately 90% of the transcribed theses came from basic taxon-specific inventory, and the rest from habitat characteristics assessment, population distribution study, and study on the interaction between two group of taxa. As we have presented in the table documenting the approximate number of occurrence records digitized up until 20 September 2018, seven student helpers have produced approximately ~3000 occurrence records in effective working days of two weeks. This number is still subject to change as we have not cleaned and validated the data yet.

The agreed protocol was to first collect theses' titles published from 2000-2017 that worked on biodiversity assessment and then sort the theses based on which data set it contributes to. We provided checklist on the criteria that a thesis should meet to be transcribed. After these criteria has been met, transcription could proceed by filling required fields of sampling-event data according to GBIF data quality requirement of sampling-event data. The sample of student helper report and updated protocol that was made briefly in Indonesian language were provided in the Annex.

Table 1. Student helper work progress on the first term of transcription period (September 2018)

Partner University	Student ID	# theses	Data Set Contributed	Note
USU	RS	0	NA	Still waiting for approval of work by university coordinator
	MU	0	NA	
	AH	0	NA	
	IH	0	NA	
UGM	AN	4	Freshwater Invertebrate, Terrestrial Invertebrate, Higher Plants, Vertebrate	
	BA	3	Higher Plants, Freshwater Invertebrate	
IPB	MF	4	Vertebrate	
	SP	4	Terrestrial Invertebrate	
	RN	3	Freshwater Invertebrate, Vertebrate	

	AJ	0	NA	Schedule issue
	DS	0	NA	Schedule issue
UI	RL	3	Higher Plants, Freshwater Invertebrate, Terrestrial Invertebrate	
	TL	7	Higher Plants, Vertebrate, Freshwater Invertebrates	
UNIPA	SA	0	NA	Schedule issue
	AD	0	NA	Laptop/computer not available
Total		**28**		

Based on our evaluation on the current transcription progress, we intend to publish our project's data set in GBIF around January 2019. At that time, we may need to use BIFA cloud IPT as InaBIF IPT is currently still on maintenance. We will require assistance from an expert to do data publication using BIFA cloud IPT and an expert who may understand how to handle the types of data we intend to publish.

Construction of custom web-based information system and its evaluation

A custom web-based information system to store the resulting sampling event data is still under construction due to changes in database structure after data enumeration workshop and unexpected increase in budget following our requests of additional features in our web application. Additionally, making a MoA for web application construction and its maintenance was quite a challenging experience for us and took longer time than expected. We expected that the delay in finishing constructing the web end no later than December 2018 so that it can be immediately evaluated and used in the workshop for analyzing data scheduled on January 2019.

The resulting custom web-based information system will be integrated to InaBIF data portal as part of our sustainability plan. It will serve as a portal to facilitate individual Indonesian publishers who wish to publish ecological monitoring data in GBIF following the sampling-event template after the Biodiverskripsi project term funded by BIFA. Thus, it will automatically add occurrence data to the IPT and contribute records to Indonesia country report and country page available in GBIF.org accordingly. Nonetheless, the integration may take time outside the project term (after April 2019) due to issues in InaBIF bureaucracy. We therefore intend to deliver the web-based information system as an independent platform first within the project timeline.

Assessing the states of quality, discovery, accessibility, and archiving of student theses

Activities under the third major goal are ongoing due to many delayed activities. Framework for analysis is under discussion and a manuscript draft is currently being made. Additionally, to promote awareness on the issue of student theses quality, we seek to routinely update project progress in our social media account and share it among our stakeholders.

Feedback from partners and stakeholders

Our correspondence with potential partner universities and the culminating workshop on 2nd of July 2018 resulted in several universities asking for a MoA between Tambora Muda Indonesia and the partner universities containing the tasks and rights of the participating parties on Biodiverskripsi project. This MoA intends to secure access to unpublished theses within partner universities, assistance from appointed university coordinator if additional information was necessary, and data publication procedure. Universities are mostly interested in the digitization efforts that could help them re-evaluate their archiving system and opportunity to make international publication from the resulting data.

Nonetheless, they are concerned about how the work will be cited in form of database so that in our transcription protocol we provide a Darwin Core extension that inform data user about the theses origin. We offer in return international publicity of the universities signing the MoA as their institutions will be shown in the GBIF after the data were published. The transcribed data will be attributed to the author and universities where the author conducted his/her research, but any resulting meta-analysis will be attributed to the parties writing the analysis and paper.

We also got feedback from universities decline to maintain a collaboration within the project framework. A university was worried about a decrease in their webometric rank if they join Biodiverskripsi. Additionally, a university consider this project not sustainable. For the latter, we assume that this is a misunderstanding from our part when conducting the presentation. Nevertheless, we also catch signs of reluctance in publishing open access data as most universities were not familiar with this practice and they argued that the long-term impact is too unknown and risky. This will become our base in promoting biodiversity data mobilization.

InaBIF greatly appreciated our effort to add to Indonesian biodiversity information database. Thus, our work has been in line with their aim to document biodiversity from many scattered sources of Indonesia including student theses and merit a funding from their budget as a co-funding. However, our unfamiliarity with other institutions budgeting mechanism resulted in

miscommunication on co-funding management. Several budget lines from InaBIF budget were really specific. For example, they could not afford workshop accommodation as full board meeting package. The hall rent, participants' dormitory, and consumption should be arranged separately for their finance report. Additionally, they could not finance any activities after November 2018 as it would be the deadline for their financial report. As there were a lot of delay in project activities' implementation, the existing money could not be used according to our adjusted project timeline, hence the decrease in co-funding from InaBIF. We adjusted this by reducing the budget for closing conference to fund other substantial activities previously assigned to InaBIF co-funding and optimizing in-kind contribution from project participants and stakeholders.

Comments on project implementation

The kick-off meeting took longer time than expected to organize as the national mass leave provided by the government this year were longer than usual: two weeks off in June 2018 in order to celebrate Eid Al-Fitr. This has greatly impeded the process of discussion between Tambora, InaBIF, and partner universities as they were prioritising in chasing their mid-year working agenda as a response to this long national mass leave.

Without this long period of postponed working days nevertheless, our effort in communicating and promoting this project for potential partner universities was apparently not efficient. Most universities took days in responding our request of audience and some universities even did not reply to our invitation at all. In the end, only five universities positively responding to our invitation for a small workshop on 2nd of July 2018 discussing Biodiverskripsi and how they could benefit from joining. This is in part because the eminent assistance of Tambora Muda members in the responding universities. Universities without dedicated Tambora Muda members or any researchers with aligned vision usually lack response.

Formulating an MoU that could be agreed upon by Tambora and each of the universities as the follow up of the workshop takes time, not to mention waiting for the responsible officials agreeing on the content and available for signing. This postponed some activities that need universities' agreement, such as training university coordinators on how to do data enumeration, access to list of theses published by universities, and publishing data from theses overall. Thus, several activities were conducted at a time to keep up with the timeline.

The work of Biodiverskripsi operational team within Tambora has not been as efficient and effective as it could have been. As we tried to make our work as efficient as possible, we only planned to have three persons for the initial Biodiverskripsi operational team and two

more persons added in the later phase of the project. Several of these persons was periodically substituted; Tambora was mostly volunteer-based and the availability of workforce largely dependent on the availability of schedule of its member. However, our approach in routinely substituting persons could not be implemented in tasks needing deep understanding of the project concept while the workload for such tasks has been the largest. The re-distribution of work has yet to be implemented.

We have moderate effectivity of transcription process as during our first weeks of data transcription, we found that on average one person can transcribe 4 theses, resulting in approximately 300 occurrence records (depends on the theses) per person per week. Due to the delay in university response and further delay of transcription process, we add more student helpers from initial 10 to 13 persons, assisted further by two members of operational team, resulting in a total of 15 enumerators. Consequently, budget for student helpers' salary needs also to accommodate the additional persons, including the operational team. To keep it within the budget, the salary will be given as output-based incentive, based on the quantity and quality of the data they transcribe in every reporting period.

Although we have 15 enumerators, some have not started its transcription process due to delay in MoU signing and students' schedule. Most of them were still working on their own studies so that better time management and effective working approach were required to keep everyone on track. Even with the promised incentive, we cannot guarantee volunteers' diligence, not to mention if long distance communication was involved. Nonetheless, the team are dedicated and could be positively reinforced with more effective protocol and working approach that suits each individual.

The construction of the custom web-based information system for Biodiverskripsi was also inefficient due to our inexperience in creating a detailed protocol and contract to start making the application. The delay was mostly due to confusion on terms and data structure that should be first solved between our enumerators and operational team before flooring it to the IT team. This demanded us to learn a lot about information technology, particularly related to database construction, and takes longer time than anticipated. Additionally, the features we originally requested for the web application were more expensive than expected and we have to rethink our approach for it. Thus, the making of web application was extended.

As a network of young Indonesian conservationists, our strength lies mainly in sharing information about our project among Indonesian conservationists and good reputation in capacity enhancement activities for Indonesian early-career conservationists. In our initial announcement about Biodiverskripsi to our social media followers, we receive a lot of positive responses (see Annex, Goal 3, links directed to social media engagement of our

overall project advertisement). Many people wish to contribute their researches to the data set; the concern of low usability of many biodiversity-based researches conducted by undergraduates seem to be shared by many people in Indonesia. Even some people who are not from academia e-mailed us to ask how they could contribute. A member even informed us of a similar effort being conducted by other group of people independently on avifauna biodiversity information. Unfortunately, we have not yet a rigid framework to accommodate all those various types of interest, researches, and data in our existing timeline and budget.

Successes to build on

Despite the delay of our deliverables and activities, we managed to adjust our approach and succeed in building a dedicated team working on Biodiverskripsi. The student helpers and newly hired operational team members were enthusiastic on this data mobilization effort as they share the same concerns and visions about the availability of biodiversity information from student theses. Their enthusiasm is our additional motivation to keep improving how Biodiverskripsi could be implemented. It also provoked InaBIF to have Biodiverskripsi further incorporated within LIPI to ensure its sustainability, assuming there were no problems with other agenda.

Feedbacks from the universities, either the ones who collaborated with us or not, also provide us with more insights to improve our project framework. We learned a lot about universities' concerns on the current state of data publishing in general, such as citation practices, data ownership issue, and publishing culture to understand the existence of additional risks that needs to be considered in reaching our project's goals. It also became our base in promoting data publishing to research institutions and motivate them to publish their data to a wider audience in the future closing conference.

The ongoing dynamic of our project also enable us to re-evaluate our working approach based on the strength and weakness of our organization and project stakeholders. Moreover, the existence of ~3,000 occurrence records from three universities along with some prototype of our deliverables proved that we are able to implement a data mobilization project that has never been conducted before in our country. We expected the current state of our deliverables to serve as positive reinforcement for improving our project management in the remaining project period. If the changes in activity timeline and budget could be implemented for the remaining budget period, we are confident to reach our target of publishing 19,000 occurrence records of ecological monitoring data before the end of our project term.

Annex – Sources of verification

Sources of verification are for example links to relevant digital documents, news/newsletters, brochures, copies of agreements with data holding institutions, workshop related documents, pictures, etc.

Goal 1: ecological monitoring data from student theses

Kickoff meeting with university representatives

Our news on meeting with university representatives:
http://www.tamboramuda.org/2018/09/lokakarya-teknis-implementasi.html

https://www.gbif.org/event/3v0H08FnZKkiE8IAuWUeS/data-publisher-initial-meeting

Pictures:

https://www.flickr.com/photos/44353813@N02/sets/72157692882546670/

We provided also one of the our signed MoU in our national language:

Workshop on data enumeration

We held our data enumeration workshop under the title “Bimbingan Teknis Transkripsi Data Biodiverskripsi” (*Technical Guidance for Data Transcription for Biodiverskripsi*) as an implementation of our activity point “Data Enumeration Workshop” from 15-18 August 2018. This workshop overlapped with our Independence Day which was a national day off to ensure volunteers and instructors attendance. The activity point “Meeting with experts to discuss data review” was partly conducted in this workshop by inviting several researchers to discuss their perspective on having biodiversity data from student theses.

Our news on the data enumeration workshop:
http://www.tamboramuda.org/2018/09/memperingati-kemerdekaan-indonesia.html

Pictures:

Samples of our Social Media engagement:

GBIF and 1 other Retweeted
Tambora Muda @TamboraMuda · Aug 17
[LastDayWorkshop] Yeay Bu Mirza Kusrini Mentor Tambora Muda dan juga dosen IPB berbagi seperti apa penelitian skripsi yg baik #Biodiverskripsi @GBIF
Translate Tweet
0:30
149 views
2
8

tamboramuda • Follow
Cico Resort, Cimahpar, Bogor
tamboramuda LAST DAY Workshop Biodiverskripsi!
Terima kasih kepada para pembicara atas kesempatannya, para partisipan yang sangat antusias belajar, dan tim Tambora Muda atas kerja kerasnya. It's a wrap! Good job
223 likes
AUGUST 18
Log in to like or comment.

Data enumeration

Our reporting procedure requires every transcriber to report the number of theses they have managed to transcribe, the resulting number of occurrences, and the challenges they encounter during transcription process. This results in each student helper sending three documents every two weeks. Their feedback has been addressed and incorporated in the data enumeration protocol guidebook we intend to produce as one of the deliverables of our project. Here, we only provide screenshots of the required reports from one of the student helpers.

Theses List:

No	Universitas	Judul Skripsi	Tahun	Apakah mengandung informasi tentang protokol/metode yang jelas?	Apakah informasi mengenai nama ilmiah spesies jelas?	Apakah memuat hasil pengamatan langsung di habitat alaminya?	Apakah memuat hasil pengamatan langsung di penangkaran?	Apakah memuat informasi daftar spesies dari tinjauan pustaka?	Ditranskripsi atau tidak?	ParentEventID (jika ditranskripsi)
1	Universitas Gadj	Karakter morfologi dan keanekaragaman foraminifera bentonik di Perairan Serdang Begadai, Sumatera Selatan	2017	Y	Y					
2	Universitas Gadj	Keanaekaragaman jenis udang air tawar (Macrobrachium spp.) di Sungai Tambakbayan Yogyakarta dan potensi per	2017	Y	y	y	T	T	Y	UGM-2017BN-AN001
3	Universitas Gadj	Keanekaragaman jenis serangga ektoparasit dan nonparasit di kandang sapi komunal Taruna Bumi, Sedyo Mulyo, d	2017	Y	Y	Y	T	T	Y	UGM-2017KC-AN002
4	Universitas Gadj	Keanekaragaman dan distribusi jenis ular (Squamata: Serpentes) di Bagian Hilir Sungai Tambakbayan, Provinsi DIY	2017	Y	Y	y	T	T	Y	UGM-2017LF-AN003
5	Universitas Gadj	Keanekaragaman lumut di lingkungan sekolah menengah Kota Yogyakarta sebagai penunjang implementasi kurikulu	2017	Y	y	y	T	T	y	UGM-2017PV-AN004

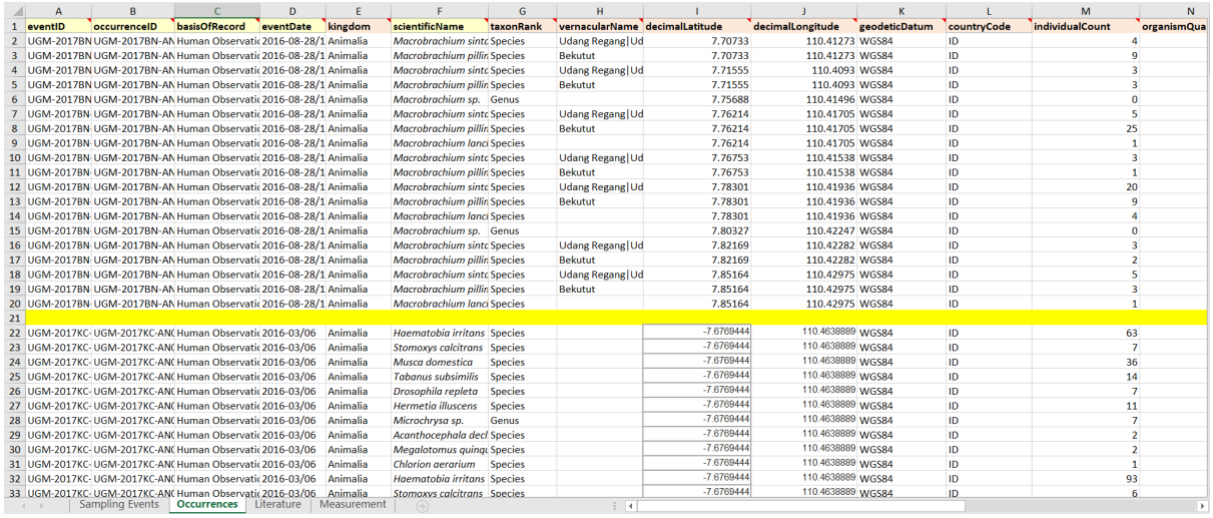
Transcription Result:

Sampling-Event

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	parentEventID	eventID	eventDate	samplingProtocol	samplingEffort	sampleSizeValue	sampleSizeUnit	locationID	footprintWKT	footprintSRS	decimalLatitude	decimalLongitude	geodeticDatum	countryCode	islandGroup	stateProvinc
2	UGM-2017BN-AN00	UGM-2017BN-AN0	2016-08-28/10-0	Convenient sampling	Using aquatic net	200	meter				-7.70733	110.41273	WGS84	ID	JAVA	D.I.Yogyakar
3	UGM-2017BN-AN00	UGM-2017BN-AN0	2016-08-28/10-0	Convenient sampling	Using aquatic net	200	meter				-7.71555	110.4093	WGS84	ID	JAVA	D.I.Yogyakar
4	UGM-2017BN-AN00	UGM-2017BN-AN0	2016-08-28/10-0	Convenient sampling	Using aquatic net	200	meter				-7.75688	110.41496	WGS84	ID	JAVA	D.I.Yogyakar
5	UGM-2017BN-AN00	UGM-2017BN-AN0	2016-08-28/10-0	Convenient sampling	Using aquatic net	200	meter				-7.76214	110.41705	WGS84	ID	JAVA	D.I.Yogyakar
6	UGM-2017BN-AN00	UGM-2017BN-AN0	2016-08-28/10-0	Convenient sampling	Using aquatic net	200	meter				-7.76753	110.41538	WGS84	ID	JAVA	D.I.Yogyakar
7	UGM-2017BN-AN00	UGM-2017BN-AN0	2016-08-28/10-0	Convenient sampling	Using aquatic net	200	meter				-7.78301	110.41936	WGS84	ID	JAVA	D.I.Yogyakar
8	UGM-2017BN-AN00	UGM-2017BN-AN0	2016-08-28/10-0	Convenient sampling	Using aquatic net	200	meter				-7.80327	110.42247	WGS84	ID	JAVA	D.I.Yogyakar
9	UGM-2017BN-AN00	UGM-2017BN-AN0	2016-08-28/10-0	Convenient sampling	Using aquatic net	200	meter				-7.82169	110.42282	WGS84	ID	JAVA	D.I.Yogyakar
10	UGM-2017BN-AN00	UGM-2017BN-AN0	2016-08-28/10-0	Convenient sampling	Using aquatic net	200	meter				-7.85164	110.42975	WGS84	ID	JAVA	D.I.Yogyakar
11																
12	UGM-2017KC-AN00	UGM-2017KC-AN0	2016-03/06	Convenient sampling	Using sweepnet	samp	-	-			-7.6769444	110.4638889	WGS84	ID	JAVA	D.I.Yogyakar
13	UGM-2017KC-AN00	UGM-2017KC-AN0	2016-03/06	Convenient sampling	Using sweepnet	samp	-	-			-7.6769444	110.4638889	WGS84	ID	JAVA	D.I.Yogyakar
14	UGM-2017KC-AN00	UGM-2017KC-AN0	2016-03/06	Convenient sampling	Using sweepnet	samp	-	-			-7.6753417	110.4482639	WGS84	ID	JAVA	D.I.Yogyakar
15	UGM-2017LF-AN003	UGM-2017LF-AN00	2016-06/12	Combination transect	Observation and samp	2500	mete square				-7.8108917	110.4291889	WGS84	ID	JAVA	D.I.Yogyakar
16	UGM-2017LF-AN003	UGM-2017LF-AN00	2016-06/12	Combination transect	Observation and samp	2500	mete square				-7.8217806	110.4172722	WGS84	ID	JAVA	D.I.Yogyakar
17	UGM-2017LF-AN003	UGM-2017LF-AN00	2016-06/12	Combination transect	Observation and samp	2500	mete square				-7.8526639	110.4172722	WGS84	ID	JAVA	D.I.Yogyakar
18																
19	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			1	-7.8307667	110.4471889	WGS84	ID	JAVA	D.I.Yogyakar
20	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			2	-7.8199833	110.3848306	WGS84	ID	JAVA	D.I.Yogyakar
21	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			3	-7.8250056	110.3758	WGS84	ID	JAVA	D.I.Yogyakar
22	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			4	-7.8112278	110.3593444	WGS84	ID	JAVA	D.I.Yogyakar
23	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			5	-7.8064639	110.3511889	WGS84	ID	JAVA	D.I.Yogyakar
24	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			6	-7.8240639	110.3741667	WGS84	ID	JAVA	D.I.Yogyakar
25	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			7	-7.8186056	110.3597056	WGS84	ID	JAVA	D.I.Yogyakar
26	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			8	-7,822	110.3992778	WGS84	ID	JAVA	D.I.Yogyakar
27	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			9	-7.8141694	110.3584583	WGS84	ID	JAVA	D.I.Yogyakar
28	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			10	-7.7995389	110.3954222	WGS84	ID	JAVA	D.I.Yogyakar
29	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			11	-7.7978111	110.3627833	WGS84	ID	JAVA	D.I.Yogyakar
30	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			12	-7.8013694	110.3514472	WGS84	ID	JAVA	D.I.Yogyakar
31	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			13	-7.814425	110.3840694	WGS84	ID	JAVA	D.I.Yogyakar
32	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			14	-7.8067583	110.3706972	WGS84	ID	JAVA	D.I.Yogyakar
33	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			15	-7.8054583	110.3804139	WGS84	ID	JAVA	D.I.Yogyakar
34	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			16	-7.7774806	110.3754556	WGS84	ID	JAVA	D.I.Yogyakar
35	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			17	-7.7955694	110.36455	WGS84	ID	JAVA	D.I.Yogyakar
36	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			18	-7.7870917	110.7871056	WGS84	ID	JAVA	D.I.Yogyakar
37	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			19	-7.7928472	110.3531611	WGS84	ID	JAVA	D.I.Yogyakar
38	UGM-2017PV-AN00	UGM-2017PV-AN0	2016-06/12	Convenient sampling	Taking picture of mos	Based on school yard	mete square			20	-7.7862278	110.359575	WGS84	ID	JAVA	D.I.Yogyakar

Sampling Events | Occurrences | Literature | Measurement

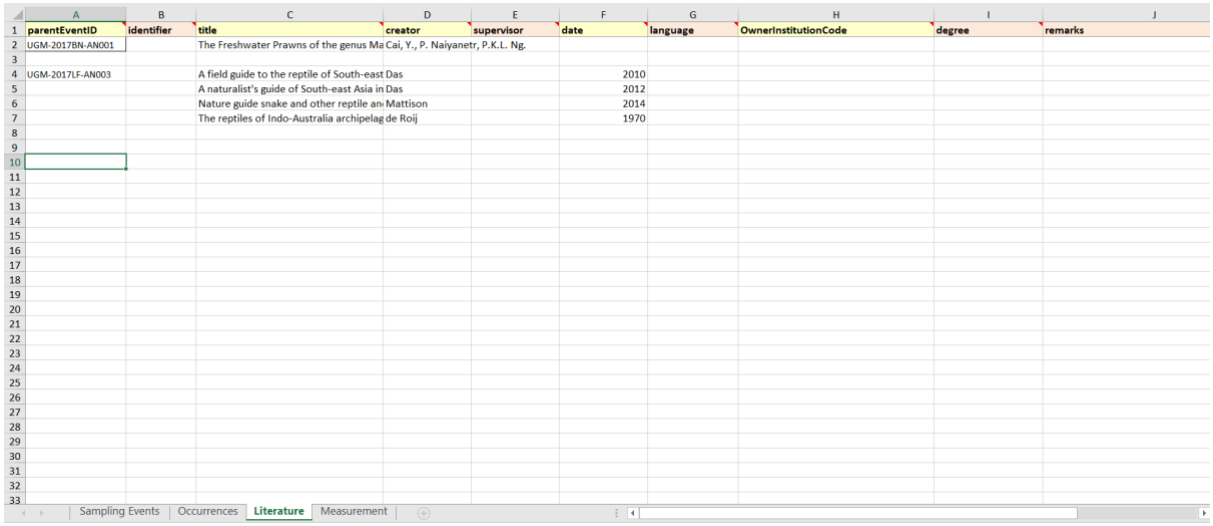
Occurrences



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	eventID	occurrenceID	basisOfRecord	eventDate	kingdom	scientificName	taxonRank	vernacularName	decimalLatitude	decimalLongitude	geodeticDatum	countryCode	individualCount	organismQua
2	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium sintc*	Species	Udang Regang|Ud	7.70733	110.41273	WGS84	ID	4	
3	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium pillir*	Species	Bekutut	7.70733	110.41273	WGS84	ID	9	
4	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium sintc*	Species	Udang Regang|Ud	7.71555	110.4093	WGS84	ID	3	
5	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium pillir*	Species	Bekutut	7.71555	110.4093	WGS84	ID	3	
6	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium sp.*	Genus		7.75688	110.41496	WGS84	ID	0	
7	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium sintc*	Species	Udang Regang|Ud	7.76214	110.41705	WGS84	ID	5	
8	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium pillir*	Species	Bekutut	7.76214	110.41705	WGS84	ID	25	
9	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium lanci*	Species		7.76214	110.41705	WGS84	ID	1	
10	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium sintc*	Species	Udang Regang|Ud	7.76753	110.41538	WGS84	ID	3	
11	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium pillir*	Species	Bekutut	7.76753	110.41538	WGS84	ID	1	
12	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium sintc*	Species	Udang Regang|Ud	7.78301	110.41936	WGS84	ID	20	
13	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium pillir*	Species	Bekutut	7.78301	110.41936	WGS84	ID	9	
14	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium lanci*	Species		7.78301	110.41936	WGS84	ID	4	
15	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium sp.*	Genus		7.80327	110.42247	WGS84	ID	0	
16	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium sintc*	Species	Udang Regang|Ud	7.82169	110.42282	WGS84	ID	3	
17	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium pillir*	Species	Bekutut	7.82169	110.42282	WGS84	ID	2	
18	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium sintc*	Species	Udang Regang|Ud	7.85164	110.42975	WGS84	ID	5	
19	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium pillir*	Species	Bekutut	7.85164	110.42975	WGS84	ID	3	
20	UGM-2017BN	UGM-2017BN-AN	Human Observatic	2016-08-28/1	Animalia	*Macrobrachium lanci*	Species		7.85164	110.42975	WGS84	ID	1	
21														
22	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Haematobia irritans*	Species		-7.6769444	110.4638889	WGS84	ID	63	
23	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Stomoxys calcitrans*	Species		-7.6769444	110.4638889	WGS84	ID	7	
24	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Musca domestica*	Species		-7.6769444	110.4638889	WGS84	ID	36	
25	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Tabanus subsimilis*	Species		-7.6769444	110.4638889	WGS84	ID	14	
26	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Drosophila repleta*	Species		-7.6769444	110.4638889	WGS84	ID	7	
27	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Hermetia illuscens*	Species		-7.6769444	110.4638889	WGS84	ID	11	
28	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Microchrysa sp.*	Genus		-7.6769444	110.4638889	WGS84	ID	7	
29	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Acanthocephala decl*	Species		-7.6769444	110.4638889	WGS84	ID	2	
30	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Megalotomus quinq*	Species		-7.6769444	110.4638889	WGS84	ID	2	
31	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Chlorion aerarium*	Species		-7.6769444	110.4638889	WGS84	ID	1	
32	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Haematobia irritans*	Species		-7.6769444	110.4638889	WGS84	ID	93	
33	UGM-2017KC	UGM-2017KC-AN	Human Observatic	2016-03/06	Animalia	*Stomoxys calcitrans*	Species		-7.6769444	110.4638889	WGS84	ID	6	

Sampling Events | Occurrences | Literature | Measurement

Literature



	A	B	C	D	E	F	G	H	I	J
1	parentEventID	identifier	title	creator	supervisor	date	language	OwnerInstitutionCode	degree	remarks
2	UGM-2017BN-AN001		The Freshwater Prawns of the genus Ma	Cai, Y., P. Naiyanetr, P.K.L. Ng.						
3										
4	UGM-2017LF-AN003		A field guide to the reptile of South-east	Das		2010				
5			A naturalist's guide of South-east Asia in	Das		2012				
6			Nature guide snake and other reptile an	Mattison		2014				
7			The reptiles of Indo-Australia archipelag	de Roij		1970				
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Sampling Events | Occurrences | Literature | Measurement

Challenges met:

ParentEventID	UGM-2017BN-AN001
Important Assumption(s)	Question about measurement

Notes

Jika informasi pengukuran pada suatu skripsi disajikan dengan rata-rata, bagaimana menyajikan

Spesies	n= 18	P. Total (cm)	panjang abdomen (cm)	Panjang Karapaks (cm)	Lebar Tubuh (cm)	Panjang Rostrum (cm)	Panjang Merus (cm)	Panjang Carpus (cm)	Chelae (cm)	Gigi Rostrum
M.sintangense	Kisaran	3,42-7,21	1,42-4,25	2,0-2,96	0.63-0,85	0,98-1,3	1,53-1,73	0,62-2,62	0,32-1,65	8-11
	Rerata	4,52	2,56	2,32	0,68	1,02	1,64	1,23	0,88	9
M.pillimanus	Kisaran	3,55- 5,92	1,95-3,55	1,28-2,54	0,43-1,03	0,4-0,9	0,35-1,2	0,21-0,67	0,33-1,34	8-12
	Rerata	4,61	2,07	2,07	0,78	0,7	0,78	0,34	0,89	9
M.lanchesteri	Kisaran	3,28- 4,82	1,94-2,82	1,27-2.0	0,43-0,65	0,6-1,0	0,44-1,24	0,44-0,84	0,31-0,53	7-10
	Rerata	3,56	2,08	1,89	0,54	0,9	0,89	0,72	0,45	8

dalam tabel measurement-nya? Hal ini membuat tidak dapat menulis occurence id dan event id, karena pengukuran tdk merujuk pada satu individu tertentu.

Mohon bantuannya:)

ParentEventID	UGM-2017BN-AN001; UGM-2017LF-AN003
Important Assumption(s)	Question about how to write literature

Notes

proses dokumentasi spesimen yang masih hidup, buku identifikasi (Phlippine Freshwater Prawns *Macrobrachium* spp.) oleh Wowor & Choy (2001) dari Jurnal *Natural History* (The *Freshwater Prawns* of the genus *Macrobrachium* Bate, 1868, of Thailand) untuk membantu proses identifikasi.

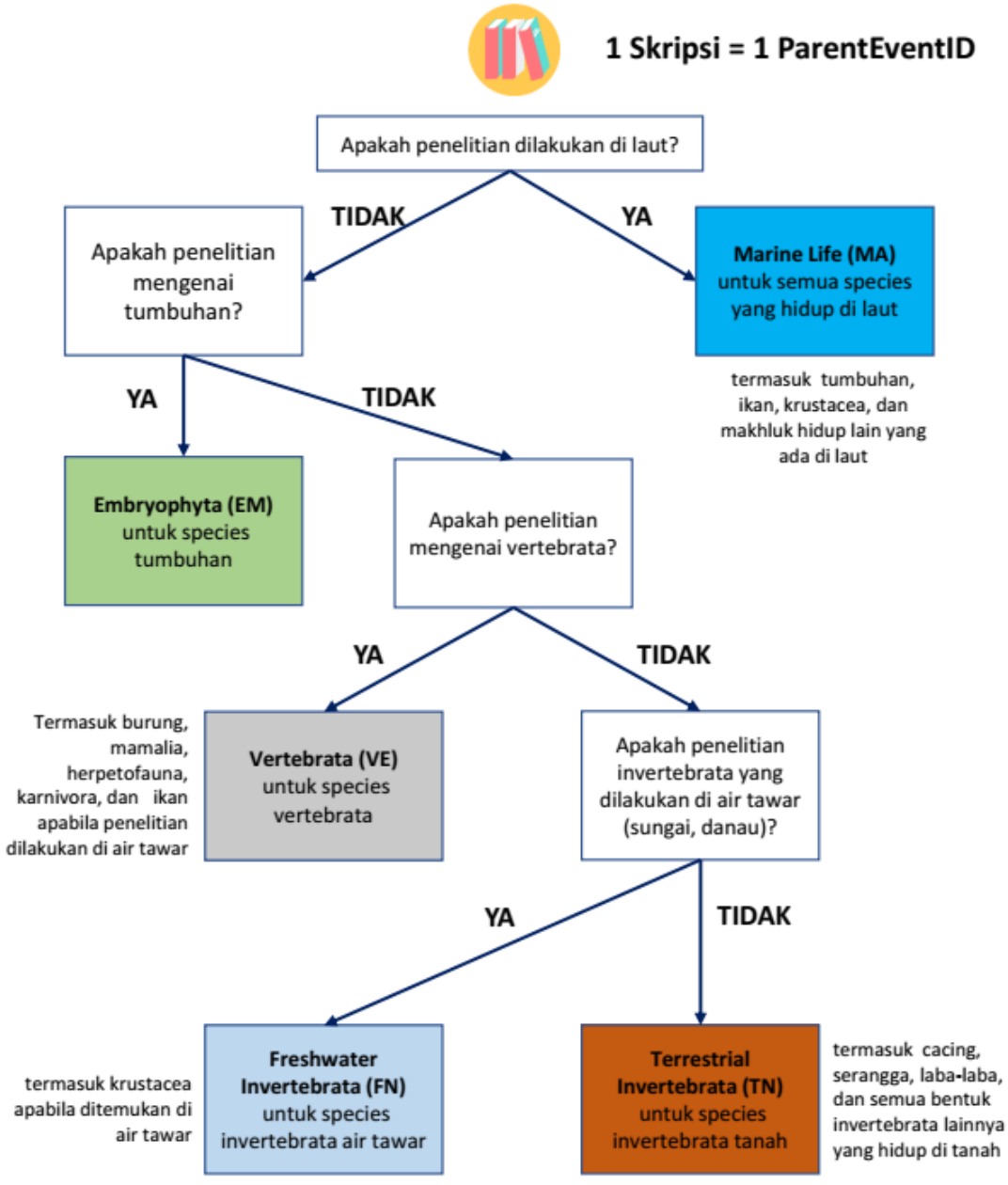
Jika dalam skripsi hanya diberikan informasi tentang Judul, sumber, dan tahun bagaimana penulisan ke dalam sheet literature? Apakah cukup dengan informasi yang ada, atau kita berusaha mencari secara detail identitas buku yang digunakan untuk identifikasi? Atau cukup mencari infomasi lainnya melalui daftar pustaka?

Hal ini juga terjadi pada UGM-2017LF-AN003

pembuatan awetan basah, dan buku identifikasi diantaranya *A Field Guide to the Reptile of South-east Asia* (Das, 2010), *A Naturalist's Guide Of South-East Asia Including Myanmar, Thailand, Malaysia, Singapore, Sumatra, Borneo, Java And Bali* (Das, 2012), *Nature Guide Snake And Other Reptile And Amphibians* (Mattison, 2014), *The Reptiles Of Indo Australian Archipelago II* (de Roij, 1970).

Current brief data enumeration protocol distributed among student helpers and operational team for their transcription guideline in Indonesian langauge:

Menentukan Taxa Group Code



Bagaimana bila satu skripsi memuat beberapa kelompok taksa?

Selain biota laut, kode taksa disesuaikan dengan kelompok taksa yang sebenarnya. Jadi sangat memungkinkan dalam 1 ParentEventID, terdapat EventID yang memiliki kode taksa berbeda.

Cheat sheet :D

Useful link

- Darwin Core Terms: http://rs.tdwg.org/dwc/terms/
- Coordinate converter: http://data.canadensys.net/tools/coordinates
- Coordinate converter: http://www.earthpoint.us/Convert.aspx
- Date converter: http://data.canadensys.net/tools/dates
- Location: http://www.geonames.org/

Things to Remember

- Biodiverskripsi's data template consists of 3 required sheets (Sampling Events, Occurrences, Literature) and 1 additional sheet (Measurement).
- In every sheet, there are several required fields to fill. The required fields must not be empty.
- Please use the pipe character "|" if you need add several entries in one cell.

How to create ID

- **ParentEventID**
  - Formula:
    [ownerInstitutionCode] – [year of publication date][abjad pertama dari nama pertama dan abjad pertama dari nama terakhir] – [volunteerID][no urut skripsi yang ditranskripsi oleh volunteer tersebut]
  - Case:
    Prasetyo, B. 2006. Struktur komunitas dan profil vegetasi dalam sistem pekarangan di Desa Jabon Mekar, Kecamatan Parung, Bogor. Institut Pertanian Bogor: Bogor. Ditranskripsi oleh Primadieta, skripsi yang pertama ditranskripsi oleh Dieta.
  - Example: IPB-2006BY-PD001
- **LocationID**
  - Formula: berupa nama singkat yang diformulasikan berdasarkan nama metode pencuplikan data
  - Example:
    - metode transek. LocationID: TR001, TR002
    - plot berukuran 400m^2, 600m^2. LocationID: PL400, PL600
- **EventID**
  - Formula: [ParentEventID] – [LocationID]
    Example: IPB-2006BY-PD001-TR001
- **OccurrenceID**
  - Formula: [ParentEventID] – [LocationID] – [TaxaCode][no urut occurrence]
  - Example: IPB-2006BY-PD001-TR001-EM001
- **MeasurementID**
  - Formula: [ParentEventID] – [LocationID]- MEA[no urut pengukuran]
  - Example: IPB-2006BY-PD001-TR001-MEA001

How to write EventDate

Tanggal	EventDate
25 Maret 2013	2013-03-25
Maret 2013	2013-03
2013	2013
25 Maret 2013 sampai 28 Maret 2013	2013-03-25/28
25 Maret 2013 sampai 23 April 2013	2013-03-25/2018-04-23

Controlled Vocabularies

- TaxonRank: http://rs.gbif.org/vocabulary/gbif/rank.xml
- unitOfmeasurement: http://rs.gbif.org/vocabulary/gbif/unit_of_measurement_2015-07-10.xml
- Geographic Names: http://www.getty.edu/research/tools/vocabularies/tgn/index.html
- BasisOfRecord:

basisOfRecord	Karakteristik
HumanObservation	Pengamatan langsung di lapangan
PreservedSpecimen	Data-data spesimen atau herbarium
FossilSpecimen	Data-data spesimen fosil.
LivingSpecimen	Data-data spesimen hidup.
MachineObservation	Pengamatan yang dilakukan dengan bantuan alat, seperti pengamatan camera-trap.

- Taxa Code

Taxa Group	Code
Embryophyte	EM
Arthropod	AR
Vertebrate	VE
Freshwater Invertebrate	IN
Marine Life	MA

Reporting

- Please send the files to diulas@tamboramuda.org in every two-weeks (biweekly)
- Subject email: [Kode Relawan]_[Tanggal Kirim (YYYY-MM-DD)]

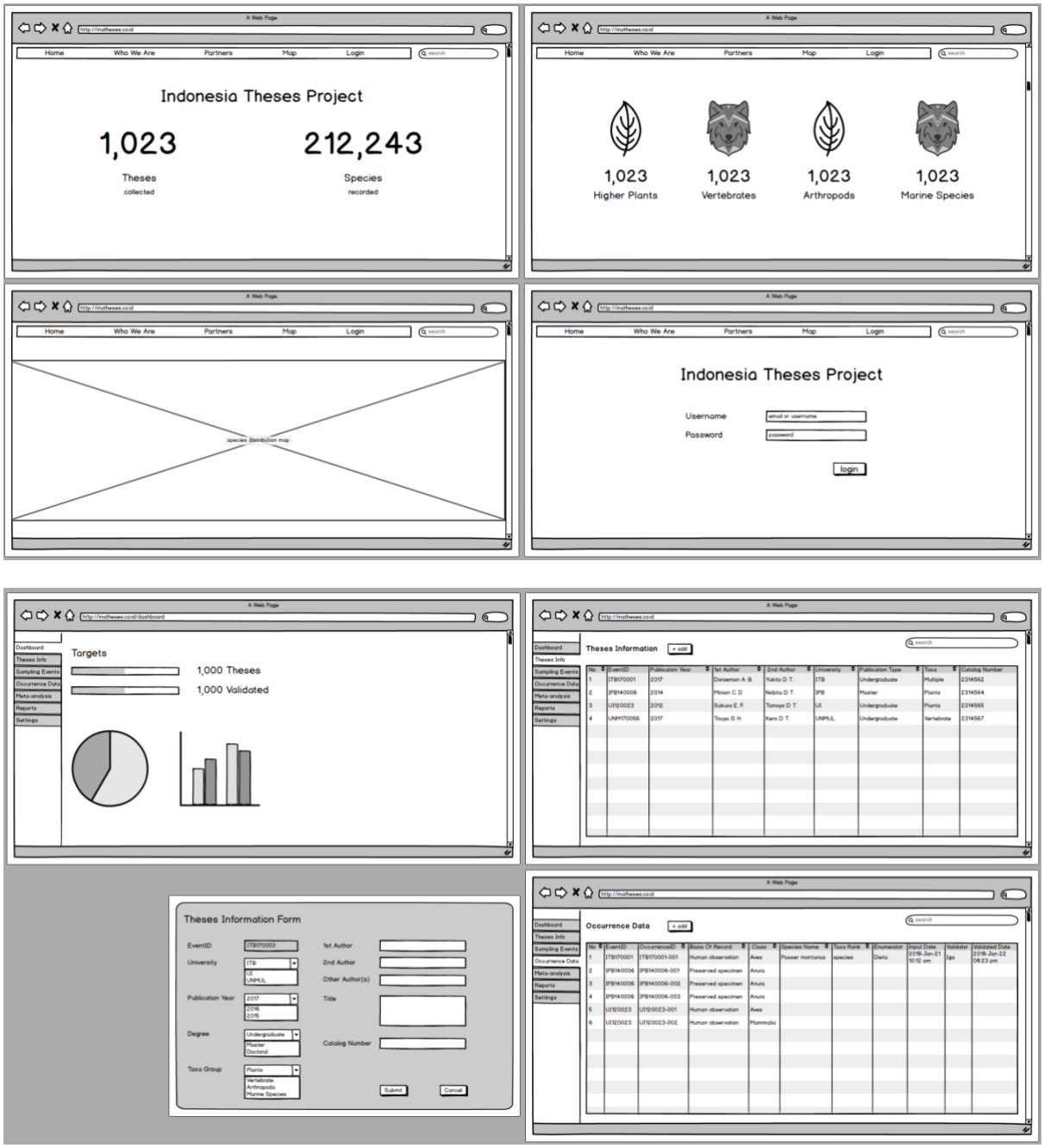
Name of the Files

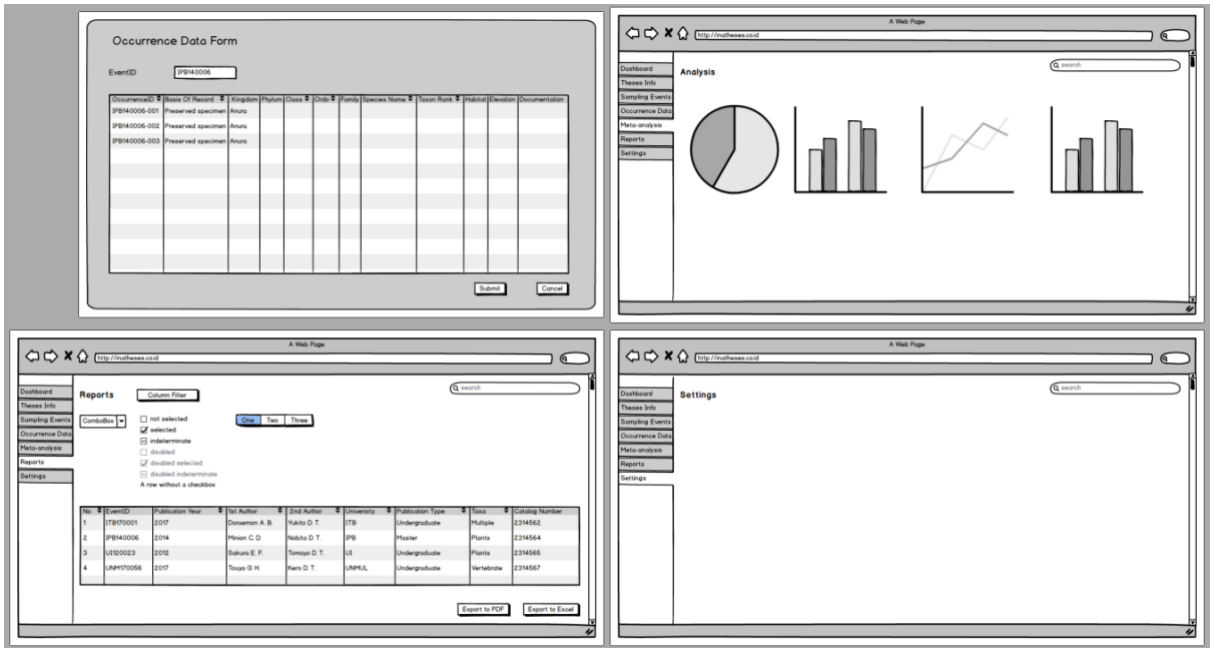
- Hasil transkripsi
  [Kode Relawan]_[Tanggal Kirim (YYYY-MM-DD)]
- Volunteer Logbook
  Logbook_[Kode Relawan]_[Tanggal Kirim (YYYY-MM-DD)]
- Thesis List
  ThesisList_[Kode Relawan]_[Tanggal Kirim (YYYY-MM-DD)]

Goal 2: a sustainable platform to assist the process of sharing and publishing biodiversity data from student theses

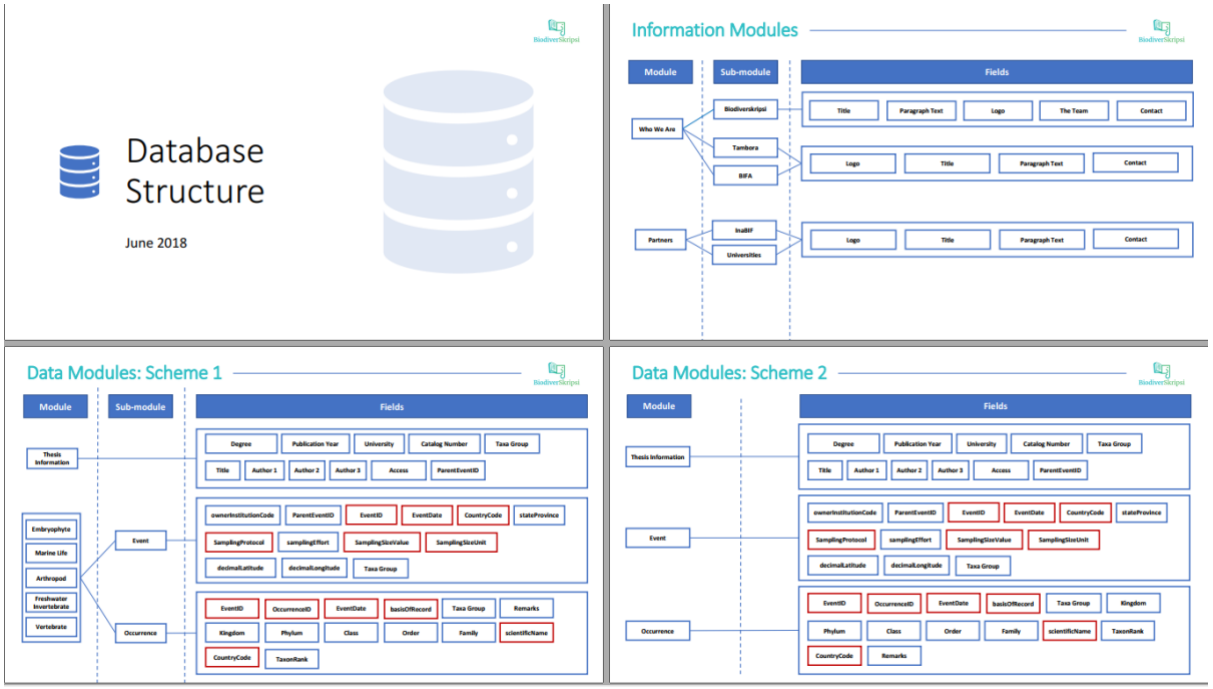
Construction of custom web-based information system

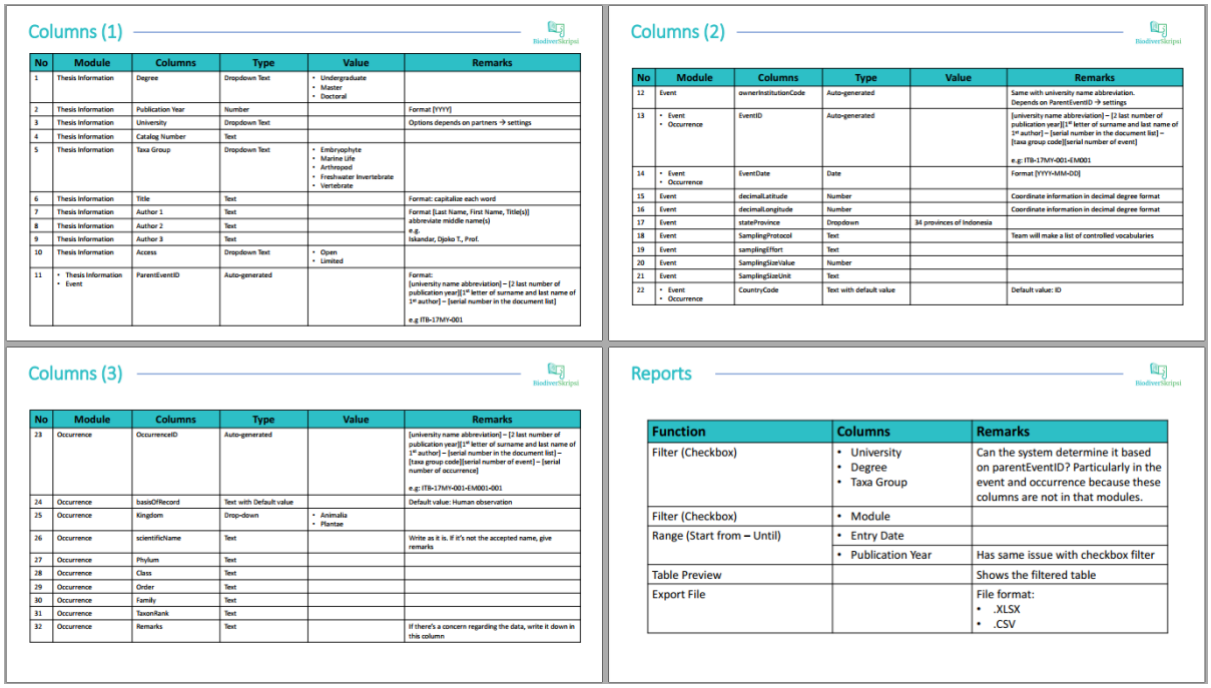
We are still discussing the interface dan database structure of our web-based information system. As we faceOur web prototype:





Database Structure prototype:





Columns (1)

No	Module	Columns	Type	Value	Remarks
1	Thesis Information	Degree	Dropdown Text	• Undergraduate • Master • Doctoral	
2	Thesis Information	Publication Year	Number		Format [YYYY]
3	Thesis Information	University	Dropdown Text		Options depends on partners → settings
4	Thesis Information	Catalog Number	Text		
5	Thesis Information	Taxa Group	Dropdown Text	• Embryophyte • Marine Life • Arthropod • Freshwater Invertebrate • Vertebrate	
6	Thesis Information	Title	Text		Format: capitalize each word
7	Thesis Information	Author 1	Text		Format [Last Name, First Name, Title(s)] abbreviate middle name(s) e.g Iskandar, Djoko T., Prof.
8	Thesis Information	Author 2	Text		
9	Thesis Information	Author 3	Text		
10	Thesis Information	Access	Dropdown Text	• Open • Limited	
11	• Thesis Information • Event	ParentEventID	Auto-generated		Format: [university name abbreviation] – [2 last number of publication year][1st letter of surname and last name of 1st author] – [serial number in the document list] e.g ITB-17MY-001

Columns (2)

No	Module	Columns	Type	Value	Remarks
12	Event	ownerInstitutionCode	Auto-generated		Same with university name abbreviation. Depends on ParentEventID → settings
13	• Event • Occurrence	EventID	Auto-generated		[university name abbreviation] – [2 last number of publication year][1st letter of surname and last name of 1st author] – [serial number in the document list] – [taxa group code][serial number of event] e.g: ITB-17MY-001-EM001
14	• Event • Occurrence	EventDate	Date		Format [YYYY-MM-DD]
15	Event	decimalLatitude	Number		Coordinate information in decimal degree format
16	Event	decimalLongitude	Number		Coordinate information in decimal degree format
17	Event	stateProvince	Dropdown	34 provinces of Indonesia	
18	Event	SamplingProtocol	Text		Team will make a list of controlled vocabularies
19	Event	samplingEffort	Text		
20	Event	SamplingSizeValue	Number		
21	Event	SamplingSizeUnit	Text		
22	• Event • Occurrence	CountryCode	Text with default value		Default value: ID

Columns (3)

No	Module	Columns	Type	Value	Remarks
23	Occurrence	OccurrenceID	Auto-generated		[university name abbreviation] – [2 last number of publication year][1st letter of surname and last name of 1st author] – [serial number in the document list] – [taxa group code][serial number of event] – [serial number of occurrence] e.g: ITB-17MY-001-EM001-001
24	Occurrence	basisOfRecord	Text with Default value		Default value: Human observation
25	Occurrence	Kingdom	Drop-down	• Animalia • Plantae	
26	Occurrence	scientificName	Text		Write as it is. If it's not the accepted name, give remarks
27	Occurrence	Phylum	Text		
28	Occurrence	Class	Text		
29	Occurrence	Order	Text		
30	Occurrence	Family	Text		
31	Occurrence	TaxonRank	Text		
32	Occurrence	Remarks	Text		If there's a concern regarding the data, write it down in this column

Reports

Function	Columns	Remarks
Filter (Checkbox)	• University • Degree • Taxa Group	Can the system determine it based on parentEventID? Particularly in the event and occurrence because these columns are not in that modules.
Filter (Checkbox)	• Module	
Range (Start from – Until)	• Entry Date	
	• Publication Year	Has same issue with checkbox filter
Table Preview		Shows the filtered table
Export File		File format: • .XLSX • .CSV

Quick-Counts

These figures will be presented on the landing page

1. Number of theses
2. Number of theses by universities
3. Number of species by taxa group
4. Number of occurrences by taxa group
5. Number of species by 5 big islands
6. Number of occurrences by 5 big islands

Users

The goal is to know the user's data search and download activities.

1. Username
2. Email
3. Download activities
4. User level (admin/user → different authorities)

Database structure for our custom web-based information system was also provided in https://www.lucidchart.com/documents/view/bb59e82a-4eb4-4728-86c1-c89a73638f77/0 but this structure is still under discussion and subject to change until October 2018.

Goal 3: compiling the states of quality, discovery, accessibility, and archiving of student theses conducting biodiversity assessment

Communicate project to national audience for wider awareness

We are communicating our project to our members and social media followers as regularly as possible. Here is our project advertisement as an op-ed in our website, partly opening a recruitment for data enumeration volunteers:
http://www.tamboramuda.org/2018/06/biodiverskripsi-satu-langkah-untuk.html

Social Media:

Twitter https://twitter.com/hashtag/Biodiverskripsi?src=hash

Facebook https://www.facebook.com/search/top/?q=Biodiverskripsi

Instagram:

Enumeration volunteer's recruitment while advertising our project in general:

https://www.instagram.com/p/BkpjUSOFuow/?taken-by=tamboramuda

https://www.instagram.com/p/Bko2BonFJFz/?taken-by=tamboramuda

https://www.instagram.com/p/Bko2BonFJFz/?taken-by=tamboramuda

Data Enumeration Workshop

https://www.instagram.com/p/Bmm-uUeIIXj/?taken-by=tamboramuda

https://www.instagram.com/p/Bmm2ZNVF1xQ/?taken-by=tamboramuda

https://www.instagram.com/p/Bmm00TwFbej/?taken-by=tamboramuda

https://www.instagram.com/p/BmmwvaQFEyw/?taken-by=tamboramuda

https://www.instagram.com/p/BmixOLcl-hA/?taken-by=tamboramuda

https://www.instagram.com/p/BmgVGRBl_YE/?taken-by=tamboramuda