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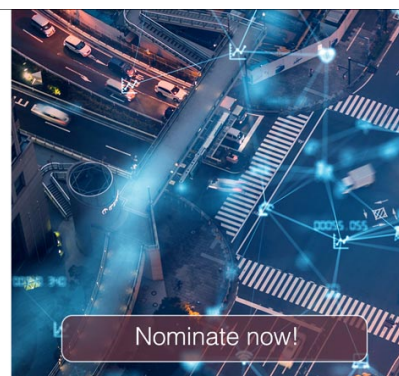


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# Preliminary study on biodiversity news based analysis of Mount Ungaran, Central Java

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**Abstract.** News is an effective event that can be used as a learning resource that inspires and motivates students in the learning process. News is a significant medium, it can be obtained through television, radio, newspapers, internet or mobile phones. One of the news that can be found in print and online media is Mount Ungaran. Mount Ungaran with its potential for biodiversity can be used as a learning resource. This preliminary research aims to analyze news stories about the biodiversity of Mount Ungaran which will be used for the preparation of teaching materials as a learning resource. This preliminary research was conducted in February-July 2020 with the method of tracing, analysis and classification. Based on the results of search, analysis and news classification about Mount Ungaran, 23 headlines were found from 17 online media sources. The classification results obtained 4 materials of the concept of biodiversity, 5 materials of threat, 12 materials of conservation and 2 materials of benefit.

## 1. Introduction

The use of news articles as a component of classroom motivation can shape reading skills and build correct learning [1]. In the digital era, getting news is very easy, it can be through peer discussions, print media (magazines, newspapers), social media via internet networks (twitter, facebook), radio, television, newspapers and online magazines or podcasts [2]. Newspapers (news) have been recognized as learning resources. Currently teachers and students can access unlimited learning resources from the internet for free and at anytime [3]. One of the news can be found in print and online media is Mount Ungaran.

Mount Ungaran has potential of natural forests and biodiversity of flora, fauna, fungi, microorganisms and various kinds of ecosystems [4]. The diverse ecosystem makes Mount Ungaran has potential high biodiversity. It can be proven by the presence of several protected wild animals, as well as various kinds of flora which have various benefits. Mount Ungaran with the potential for biodiversity can be used as a learning resource [5]. Learning resources can improve the academic achievement of students in learning biology [6]. The purpose of this preliminary research is to analyze news stories about the biodiversity of Mount Ungaran which will be used for the preparation of learning resources.

## 2. Methods

This preliminary research was conducted in February-July 2020 with the method of search, analysis and classification. The search was carried out to find news about the biodiversity of Mount Ungaran through



online media. Analysis was carried out to find out the material content of the news. The results of the analysis are used to classify the news material according to Basic Competence 3.2 and Basic Competence 4.2., namely the Concept of Biodiversity, Threats, Conservation and Benefits.

**3. Results and Discussion**

Newspapers (news) have a very effective role in creating a reading habit. Reading is an important element of education to increase students' awareness of the issues they are interested in such as political, economic, social, cultural, and educational students about the issues they are interested in such as political, economic, social, cultural, and educational [7]. News is something that has happened or is still happening, that is being told by the media. Consumption of news on social media through online news services has become a habit [8]. Social media is booming among young people around the world. The positive impact of social media among students is actually higher than the negative impact. Teachers and students can use social media as a means of information and communication to facilitate and improve the learning process [9]. Social media applications foster collaboration as they allow students to work together to achieve a common goal. The benefits of online social media must be utilized in a learning environment [10].

The reading of news is very useful for young citizens to develop their language ability and to get knowledge of current events and the world. The reading of news is an intellectual activity and a good habit for every citizen [11]. Local news are able to contribute to the lifelong learning of their readers through limited availability of opportunities and inadequate access to public institutions and employees, education, health, environment, socio-culture. life, work and news [12]. News about the biodiversity of Mount Ungaran can be found in several online media. The results of search, analysis and classification found 23 news about the biodiversity of Mount Ungaran (Table 1).

**Table 1.** Biodiversity news of Mount Ungaran

No	News Headlines	Year	Sources of News	News Material Classification			
				K	A	P	M
1.	Two Beings Guarding Mount Ungaran	2012	Kompasiana.com	✓			
2.	Unnes Preserves Rare Mount Ungaran Animals	2013	<u>Berita</u> Unnes			✓	
3.	Kades in Semarang issues perdes against hunting Javan langurs	2015	Kompas.com			✓	
4.	Do not hunt again for animals on Mount Ungaran	2016	Kompas.com			✓	
5.	Even though there is a surrender, the eagle is still under hunting threat	2017	Mongabay environmental news site		✓		
6.	Semarang cleanliness; Duh Trash Scattered on Mount Ungaran	2017	Solopos.com		✓		
7.	Maintain water supply. Thousands of Climbers Green Mount Ungaran	2017	Kompas.com			✓	
8.	Black Eagle, Largest Predator in Ungaran	2017	Konservasigunungungan.wordpress.com	✓			
9.	Waste Bottled Mineral Water So a heart-shaped installation at the Mawar Basecamp, Gunung Ungaran	2017	Travel .detik.com			✓	

10.	Wonolopo Herbal Village	2017	Jateng Today		✓
11.	Chrysanthemum Clapar Village, The Beauty of Flower Gardens at the Foot of Mount Ungaran	2017	Kompas.com	✓	
12.	Nyekar Tradition and Seller Turnover at the Bandungan Flower Market	2018	Kompasiana.com		✓
13.	UNNES Preserves the Biodiversity Potential of Mount Ungaran through Focus Group Discussions	2018	Biologi.unnes.ac.id		✓
14.	Get to know the beauty of chrysanthemum more closely	2018	Kompasiana.com	✓	
15.	Forest on the Slopes of Mount Ungaran Burned	2018	News.detik.com		✓
16.	The peak of Mount Ungaran is on fire	2018	Media Indonesia		✓
17.	Slope Forest of Mount Ungaran near Gedong Songo Temple Burned Up	2019	Media Indonesia		✓
18.	Prayers Together in Two Springs Mark the Mot Banyu Ritual of Gogik Residents	2019	Ungarannews.com		✓
19.	The beauty of Medini Tea Plantation at the foothill of Mount Ungaran	2019	Jatengribunnews.com		✓
20.	Ngesrep Balong to become the Orchid Conservation Village	2018	Suaramerdeka.com		✓
21.	Kaliandra trees will beautify Mount Ungaran	2019	Suarabaru.id		✓
22.	1,800 climbers 'Green' the slopes of Mount Ungaran	2020	Ayosemarang.com		✓
23.	1001 Climbers Planted Trees	2020	Kompas.com		✓

Information

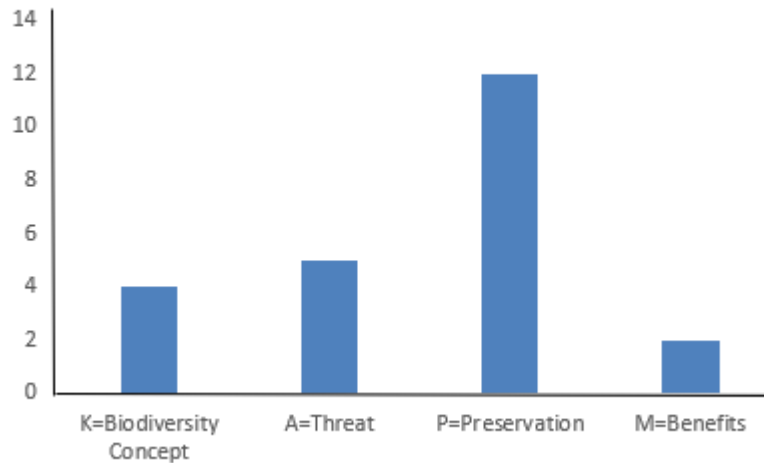
K = Biodiversity Concept

A = Threat

P = Preservation

M = Benefits

Table 1 shown the news was published from 2012 to 2020 from 16 online media sources namely Kompasiana.com, Berita Unnes, Kompas.com, Mongabay, Solopos.com, KonservasiGunungUngaran.wordpress.com, Travel.detik.com, JatengToday, Biology.unnes.ac.id, News.detik.com, Media Indonesia, Ungarannews.com, Jatengribunnews.com, Suaramerdeka.com, Suarabaru.id, and Ayosemarang.com. The results of search for news through online media, analyzed the content of the news materi. The analysis is done by reading and understanding the news material. The results of the analysis are used to be classified according to the material on biodiversity in Basic Competencies 3.2 and 4.2. The classification results obtained 4 materials of the concept of biodiversity, 5 materials of threat, 12 materials of conservation and 2 materials of benefit. The results of the news classification can be seen in Figure 1.



**Figure 1.** Classification of Biodiversity News Materials

Figure 1 shows that the news about the conservation of the biodiversity of Mount Ungaran is mostly found compared to other news. It means that people's concern for the preservation of the biodiversity of Mount Ungaran is maintained. News about threats of the biodiversity of Mount Ungaran still exist every year, such as: forest fires, pollution and hunting of animals. They need special attention for the preservation of Mount Ungaran.

Mount Ungaran has abundant biodiversity consisting of flora and fauna. There are several taxon that are easily recognized by the people of Mount Ungaran. These taxons are: flora (100%), butterflies (98.41%), birds (96.83%), mammals (93.65), dragonflies (90.48%), frogs/toads (82.53%), and reptiles (73.02%). There are 47 protected species, among others: Javanese hawk eagles, whreathed hornbill, langurs, porcupines, anteaters, and python. The people of Mount Ungaran use many plant groups such as pine, orchid, and fern. The results of respondents showed that 98% of the community agreed to protect the Mount Ungaran species. This shows that the people of Mount Ungaran have a very high awareness of preserving the nature and biodiversity of Mount Ungaran [13]. The biodiversity of Mount Ungaran can be used as a learning resource. The results of the classification of the news and biodiversity of Mount Ungaran will be used in the preparation of teaching materials as a learning resource for biodiversity material.

Daily newspapers and popular magazines can be used as a source of information, questions, new topics, problems, for teaching and learning science in schools. Reports in the popular press can also be used to illustrate the applications of science, particularly in relation to content that relates to local issues. Moreover, it can be used as contexts for developing scientific literacy, particularly in relation to skills and ideas associated with critical thinking about science as a human enterprise, science for citizenship, science for improving decisions related to daily living, and practice for lifelong learning. Scientifically literate person is not learner only for during school term but also s/he is a life-long learner [14].

Science knowledge for critical reading of science news enhances cognitive learning. In addition, from a cognitive aspect, linking science knowledge with critical reading of science news can increase the capacity for understanding and application. From the aspect of the dimension of knowledge, it also improves factual, conceptual, and procedural knowledge learning [15]. Learning using news media helps students have better knowledge, understanding and interpretation than those who do not use news media [16].

#### 4. Conclusion

The results of search, analysis and classification of news about Mount Ungaran, found 23 headlines from 17 online media sources. The classification results obtained 4 materials of the concept of biodiversity, 5 materials of threat, 12 materials of conservation and 2 materials of benefit. The results of the analysis and classification of news about Mount Ungaran can be used as a learning resource on biodiversity materials.

#### 5. Acknowledgments

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