

The Abstract of the Environmental Factors and
Faunae of Several Caves in Korea
(Especially on KOSi-gul, Yongdam-gul, and
Kosu-gul Caves) Feb 15. 1976.

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The author investigated the environmental factors with the faunae of several Caves-Kosadong-gul, Yoechon-gul, KWangcheon-gul, Neulgol-gul, Miwon-gul, Yongdom-gul, and Kosi-gul in Korea during the period of the years 1973 through 1975.

1. ★ The environmental factors investigated in Caves were air temperature, water temperature, moisture, and PH of water in Caves.

2. ★ The faunae of caves surveyed are as follows:

(Table I.)

Name of Caver	Total number of animals collected		Number of species Collected		
	class	Species	Troglophile	Troglophile	Troglophile
Kwangchoen-gul	9	32	7 (21,9%)	11 (34,4%)	14 (43,7%)
Neulgol-gul	5	21	3 (14,3%)	6 (28,5%)	12 (57,2%)
Miwon-gul	5	9	2 (22,2%)	1 (11,1%)	6 (66,6%)
Kosudong-gul	5	18	2 (11,1%)	5 (27,7%)	11 (61,2%)
Yoechon-gul	5	8	1 (11,1%)	4 (44,4%)	4 (44,4%)
Gosidong-gul	6	41	33%	27,7%	41,0%
Yongdom-gul		25	50%	12,5%	37,5%

3. ★ This author summarizes the studies on the faunae and environmental factors in both Kosi-gul and Yongdom-gul caves.

Kosi Cave and Yongdam Cave are located in the same general area-Hadong-myon, Yongwol-gun, Kam Kanwon-do province,

4. But they are different in structure and fauna from each other.

Faunae of these Caves were investigated in April 1966 for the first time, resulting in 16 papers which reported 19 animal species in Kosi-gul cave and

12 animal species in yongdam-gul cave. Those two caves have been investigated by local Scientists repeatedly. in 1971 Mr. Lee H, P, and Mr. Namgung J. summarized all the research data available.

They also added 20 more species for Gosi-gul cave and 8 more species for Yongdam-gul cave. Finally they reviewed fore casting ecosystem of caves.

This writer conducted investigation into these two caves twice, 3 - 6 May 1973 and 13 - 14 May 1973. Summariyed below are results of the investigations;

1) Analysis of animal ecology.

a) 2 more species were added, totaling 41 Species in Gosi cave wherc- as a total of 25 species includingg 1 species belonging to ostrocodas wareV-erified in Yondom cave.

b) Review of ecological analysis. (see the table I.)

c) Review of ecosystem Gosi-gul cave is not only large in siye but varied. each area wihhin the cave showsa sig nificJ nt difference in temperature, bumidity and air stream.

Deficiency of organic materials in Kosi-gul cave results in poor fauna. On t- he other hand, yongdom cave is relatively small in siye but vertical in structure, ture, and Stable in tmperature, humidity and air Stream.

Farther, abundance of organic materials Provides favarable growth conditio n for fauna.

2) Classification of collected animals

(Table 2)

Class	Gosi-gul care	Yongdam-gul Care
Gastropoda	2 speciee	2 specices
Crustacea	5 "	2 "
Myriapoda	4 "	4 "
Lnsecta	17 "	9 "
Mammalia	3 "	1 "
Arachnoida	10 "	6 "
Total	6 Classes 41	24

※ Out of 41 species in Gosi cave, 39 species are those which were already reported.

1. species of class myriapada (Centipede sp.) and I species of class mam- alia (but. sp.) were newny discovered during last two separate inrestigations.

I species of class ostrocodas is additionally reported in Yongdom cave also.