The configuration and natural features of Woldun cave as tourism resources

Chung ryol hong*3)
Min Chae Jeong**

The inside of Woldum cave has a complicated configuration with many dynamic aspects. The number of configurations and natural features of the ground discovered up to now is about 20. When we discuss the value of the potential tourism that the cave has, Woldun cave is a lime cave with resourceful value and tourism value, considering the size of cave and excellency of the spectacular sight. In addition, the large stalagmite's file lining in the inside of the cave is a magnificent spectacle. Therefore the Woldun cave, as a lime cave, is very important for tourisn level as well as academic ones.

1. Tourism characteristics of Woldun cave

Woldun cave is located in Hajang-myŏn, Samchŏk-gun, Kang-Won-do. It belongs to the classification of stalactitic cave, or

^{*} Kimchôn junior college professor

^{**} A lecture, department of tourism, Kimchôn junior college

lime cave. That is, when limestone covers the surface of the earth, if it rains, the water of rain dissolves the limestone and penetrates the earth.

Also Woldun cave is a vertical one, as it has been eaten away vertically, penetrating deeply into the earth. Woldn cave is also inhalational type. This one pierced on inclined plane is broader and more developed toward the buttom.

The vertical length of Woldun cave is only about 130m. Because the inside of the cave is very large, it is possible for us to set up facilities for tourist passage above 300. In addition to this, the configuration and natural features of Woldun cave are various and solemn. This cave is located near the top of an valley with many natural features and various deposits of lime caves. It is therefore a kind of cave museum.

II. The configuration and natural feature inside the cave.

As I alluded to above, Woldun cave is an irregular, vertically cylindrical cave. The inside of the cave can be divided into five sections, namely A-1, A-2, B, C, and D(figure 1)

1. The distribution of configuration and natural features in A-1 section.

Section A-1 is located in the position of inclination of 30° , 20-30m below the cave entrance(figure 2). The stalagmites are spaced at intervals of 30-50cm along the passage of the inclined plane to get down this section. The size is a height of 1.5m, a perimeter of 2.8m, beside this, there are $0.3\text{m} \cdot 0.8\text{m}$, $0.6\text{m} \cdot 0.1\text{m}$, $0.4\text{m} \cdot 1.0\text{m}$, $1.2\text{m} \cdot 7.9\text{m}$, $0.7\text{m} \cdot 2.6\text{m}$, $0.9\text{m} \cdot 1\text{m}$ etc.

The cave is also developed along the suface of the wall. When we step down completely along the inclined plane, we can find two open spaces composed of two steps. There are a variety of configuration and natural features including the cave coral, stalactites, stalagmite groups, and stone pillars. The large stalactites of length of 3m and width of 4.2m are developed along the ceiling.

2. The distribution of configuration and natural feature of in A-2 section.

The A-2 section is located at 30m below A-1 section(figure 1). Therefore the A-2 section is located below the floor of the A-1 section. Along this passage, secondary products are developed.

Figure 3 shows distribution chart of configuration and natural features of this section. In this area, there are cave coral, stalactites, stalagmites, and calcified terrace, etc. The size of stalactites is usually about 1-1.5m in length and 3.0m in width etc. Among them, some stalactites have a two-layer structure. The size of cave coral is

about 1-1.5m in length and 3m in width etc. Some stone pillars are covered with cave coral.

- 3. The configuration and natural features of the cave in B section Two large stalactites and flowstone have developed along the surface of wall. (figure 4). These are representative characteristics. The size of stalactites is about 10m in height and 2.5 to 6m in perimeter. The development of the flowstone is very distinct, and the length of 20m and width of 5m are epresentive.
- 4. The configuration and natural features of the cave in C section

 The open space is developed at the cavity between C section and

 D section. In C Section, there are many stalagmites. Besides this,

 flowstone the shape of curved line and lotus flower has

 developed(figure 5). In the midst of a group of stalagmites, an

 8m-tall stone pillar has developed.
- 5. The distribution map of the configuration and natural feature in D section D section is located at the bottom of Woldun cave and it corresponds to the blind end of a mine gallery. The buttom consists of two 3m-deep ponds against the wall between the two ponds. That is, cave coral, calcified terrace, stone pillars, and stalagmites have developed(figure 6).

III. Conclusion

As discussed above, the passage inside Woldun cave is a complicated configuration, and the pattern of cave deposits varies widely. The number of configuration and natural features of the cave up to now is about 20.

When we discuss the tourism value of the cave, Woldun cave is a lime cave with resource value and tourism value, Considering the size of the cave and the excellence of the spectacular view.

Besides this, Woldun cave offers terrible fear and a quite lonely feeling that we can't experience at other caves. Its underground mystery and sence of confinement heighten our fear and excitement as surprising sights are likely to appear suddenly in every direction. Thefore Woldun cave is very important lime cave for both tourism and academic study.

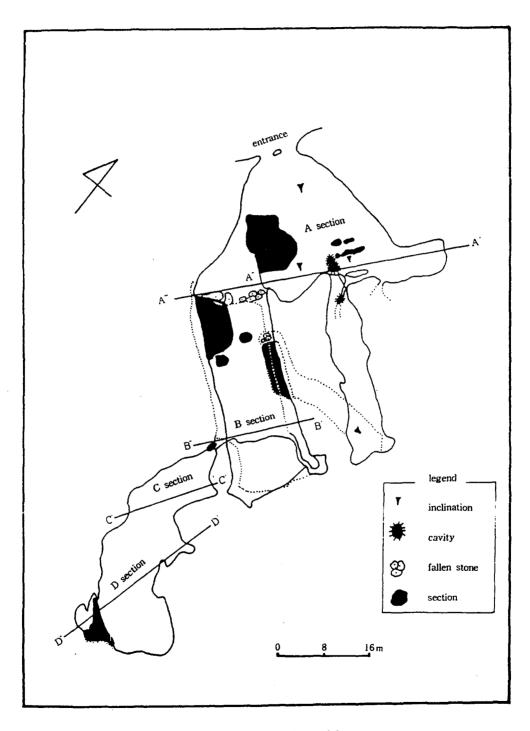


figure 1 The section map of woldun cave

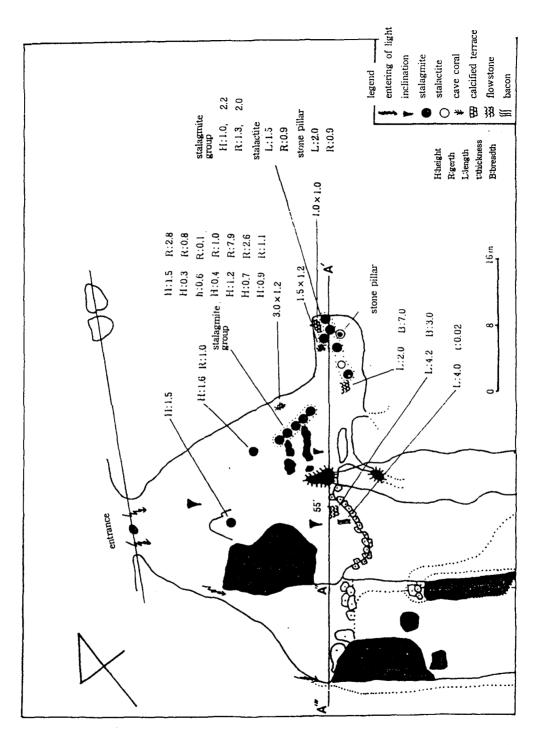


figure 2. Distribution map of configuration and natural feature of the cave in A-1 section

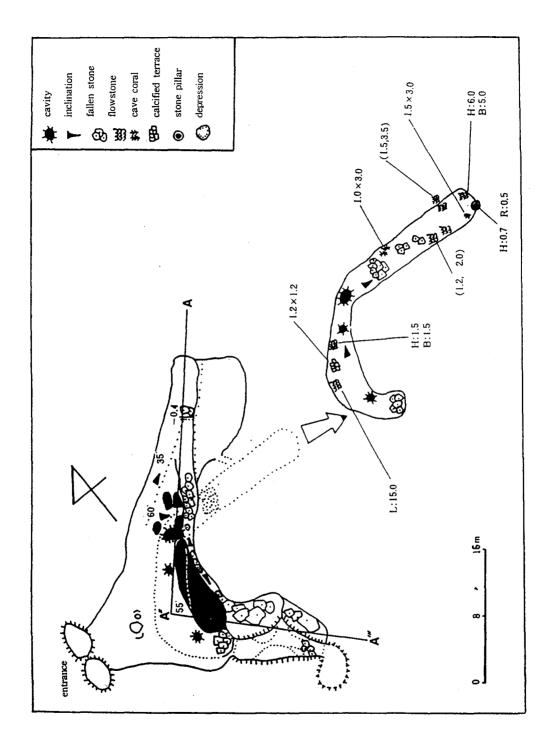


figure 3. Distribution map of configuration and natural feature of the cave in A-2 section

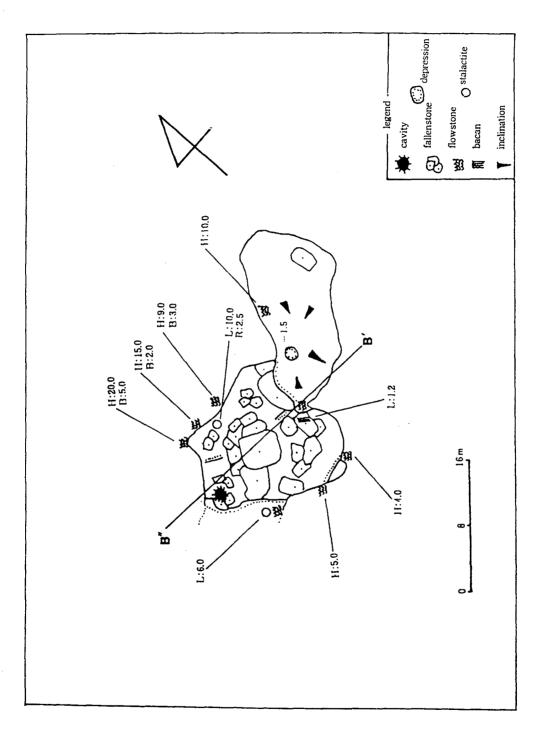


figure 4. Distribution map of configuration and natural feature of the cave in B section

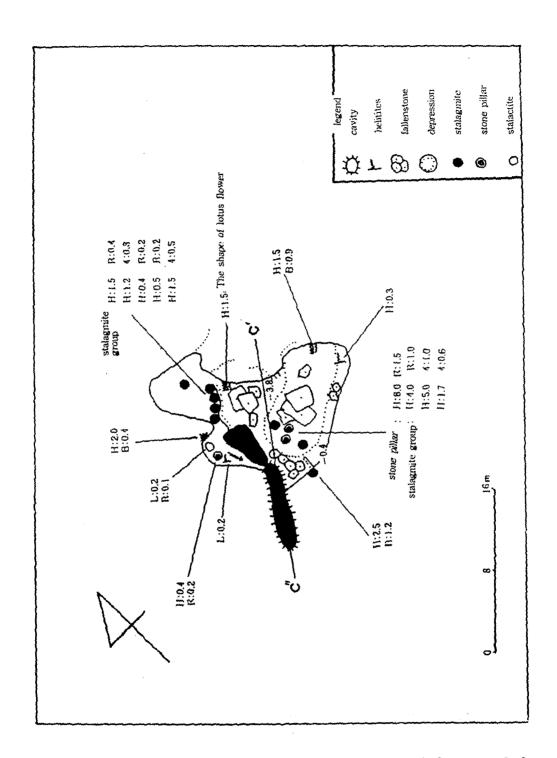


figure 5. Distribution map of configuration and natural feature of the cave in C section

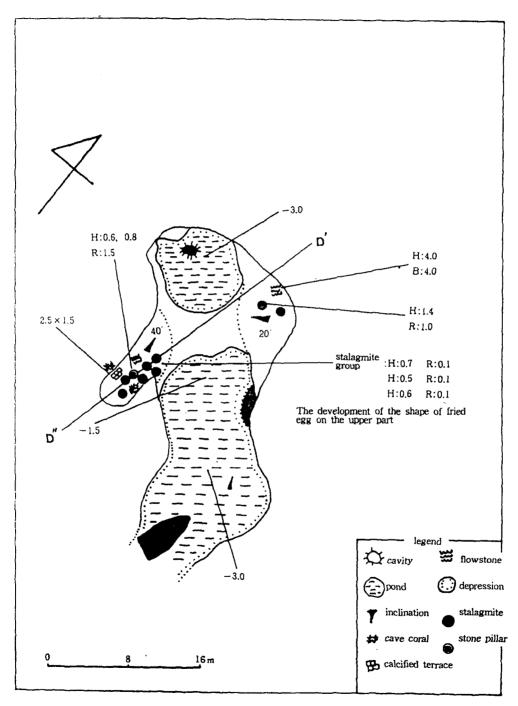


figure 6. Distribution map of configuration and natural feature of the cave in D section

REFERENCES

- Dan Yang Gun, 1990.1991, an annual report of statistics in Danyang Gun.
- Hong Si Hwan, 1978, the natural cave of the South Korea, Gun Hwa Sa
- Hong Si Hwan, the broad view of the cave in the South Korea, Samju publisher.
- Archer, B. H and Owen, C., 1971, "A Demand model for leisure travel", Environment and planning, 6,65-77