Chapter III

Study Site

3.1 Location

The study site was Tarn Lord Noi Cave. This cave, a popular cave for tourist is located in Chaloem Rattana Kosin National Park, Khao Jode Subdistrict, Si Sawat District, Kanchanaburi Province. Following the geological classification, this cave is in the western range of Thailand.

Tarn Lord Noi Cave is located in the middle area of the national park. It is about 100 m from the park headquarter. The location of the upstream entrance is 0533144E, 1620969N and 0533252E, 1620701N for the downstream exit. The elevation at the upstream entrance is about 317 m from the average sea level. The width and the height of this entrance are about 35 and 7 m, respectively. The elevation at the downstream exit is about 300 m from the average sea level. The width and the height at this exit are about 25 and 7 m. This cave is about 320 m in length. It can be divided into 3 major parts, including one main cave and two minor caves. The main cave is about 280 m long and its passage is in the northwest to the southeast direction. Each of the minor caves is about 20 m in length.

3.2 Topography

The topography inside the cave is not too steep. The floor slopes down from the west to the east. The height of the ceiling varies throughout the cave. Thus the ceiling is against the flow of water in some parts of the cave.

3.3 Type

This cave is a stream cave. There is a rocky permanent stream, Huai Mae Kraphroi, flows through. Most of the stalactite and the other environments in the cave above the normal water level are quite dry. Hence, this cave is considered to be a dead cave or a dry cave in the future.

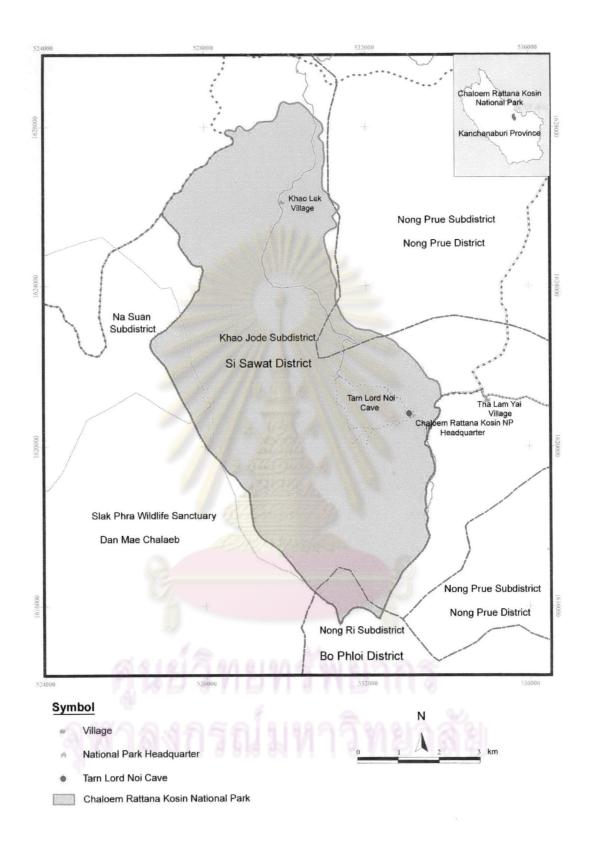


Figure 3.1 Map of Chaloem Rattana Kosin National Park and location of Tarn Lord Noi Cave (Modified from C-Tech International Co, Ltd., 2002).

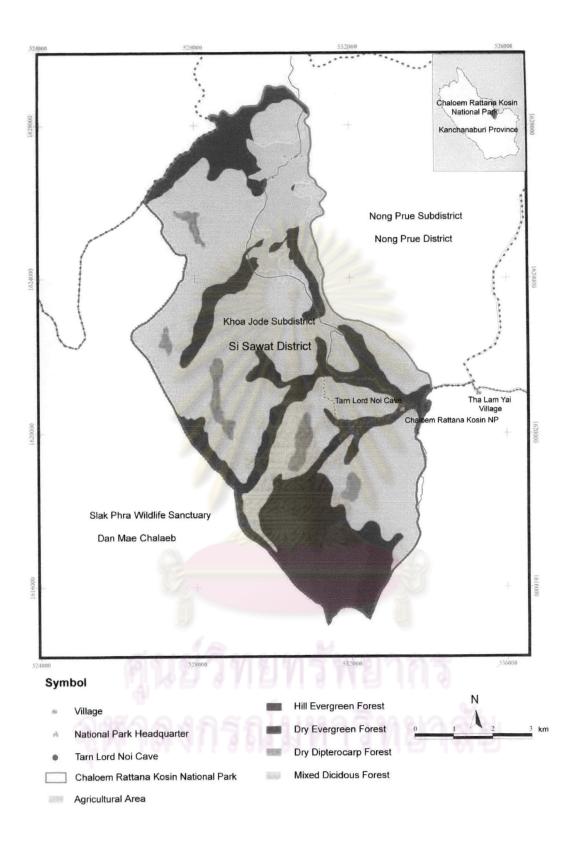


Figure 3.2 Map of forest types at Chaloem Rattana Kosin National Park (Modified from C-Tech International Co, Ltd., 2002).

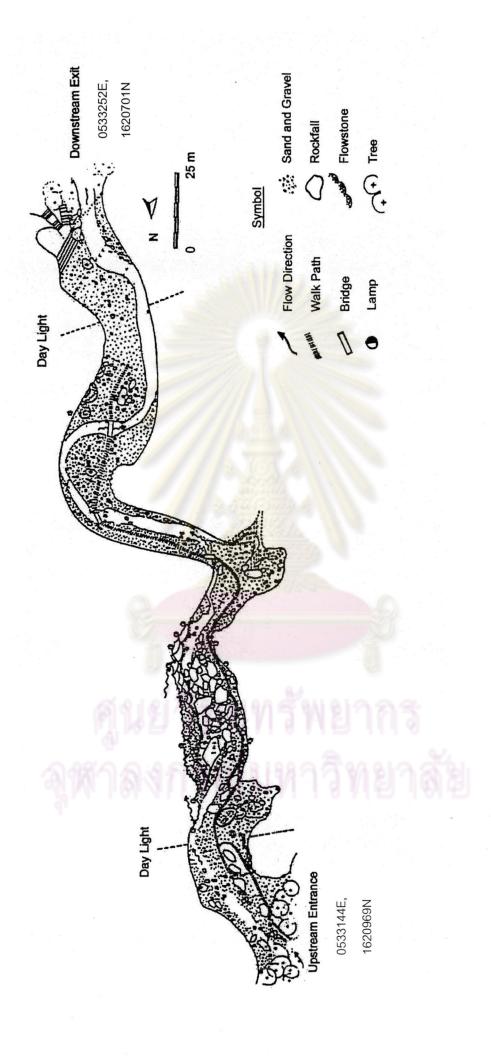


Figure 3.3 Map of Tarn Lord Noi Cave, Chaloem Rattana Kosin National Park, Kanchanaburi Province (Modified from C-Tech International Co, Ltd., 2002).

3.4 Sediments

The sediment deposited inside the cave comes from the mountains upstream by water and from an older sequence of sediments within the cave itself. The sediments from the upstream are quartz sand and gravel which consist of very rounded granite pebbles and rare blocks up to 30 cm in diameter. The sediment derived from the older in-cave deposits included rare rounded to sub-angular granite up to 1 m across, pieces of flowstone up to 50 cm, and very large sub-angular limestone boulders as well as sand and gravel.

3.5 Speleothems

For this cave, speleothems are formed by the deposition of calcium carbonate. They are consisted of stalagmites, stalactites, draperies, flowstone sheets, and rimstone pools. Most of them are dry and covered with powder. The most distinct speleothem is the flowstone located at the middle part of the cave. It is about 50 m in length and is the most beautiful view point inside the cave.



Figure 3.4 The environment inside Tarn Lord Noi Cave.

3.6 Stream

Huai Mae Kraphroi is a permanent rocky stream that flow throughout the cave. The stream varies in its width due to the water level. In March 2002, before the rainy season, the narrowest part of the stream inside the cave was about 1 m. The water level was highest in May 2002 that caused by heavy rain and the widest part of the stream inside was about 10 m.



Figure 3.5 Stream width at the downstream entrance in November 2001.

ลุฬาลงกรณ์มหาวิทยาลัย



Figure 3.6 Stream width at the downstream entrance in April 2002.



Figure 3.7 Stream width at the downstream entrance in May 2002.