Site Code 12

Environment

Description

Long, active and semi-active cave with multiple entrances. Found in a small hill with good forest cover. High humidity

Air Temp C Humidity % Water Temp C Water pH CO2 High % O2 Low % 19 96 19 7.8

Further Data

average of 3 measurements - November, January, May

Management

Description

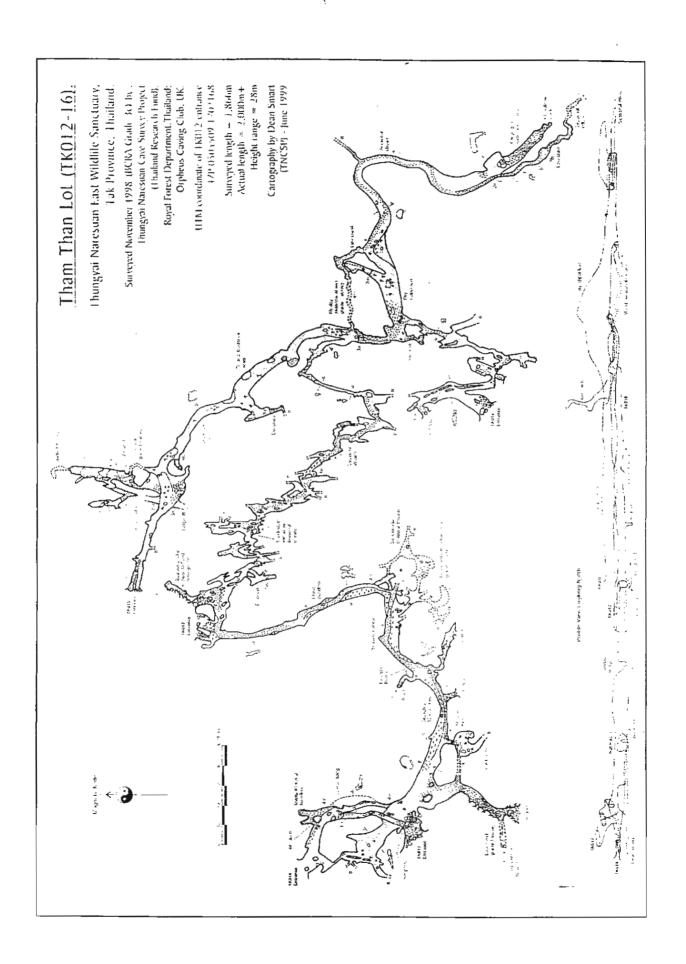
Remote, within a wildlife sanctuary and protected. Very unlikely to be developed. Possible sedimentation from nearby fields has now ceased

Classification Energy Rating Manager
3.1 High Royal Forest Department

Impacts
Increased Sediment

Impact Sources

Deforestation: Agriculture



Site Code 13

-

English Names

Thai Names

TK017

TK017

Location

<i>Province</i> Tak	District Umphang	Protects WS Thi	Zone North		
Mapsheet 4740 H	<i>UTM Zone</i> 47P	Eastings 493405	<i>Northings</i> 1717119	<i>Latitude</i> 15.532489	<i>Longitude</i> 98.938499
Elevation, m 860	Length, m 158	Depth,	•		\Tak\TK0017.tif

Access Description

Walk downvalley from Thung Nar Noi ranger station for 4km. Footpath passes by the entrance in the obvious limestone hill.

General Description

Large entrance closes down to a short crawl. This opens into a high rift passge eventually becoming too low. Turning right midway along the rift leads to crawls, a doline entrance and a small chamber. Large passage gets lower to a crawl through porcupine faeces and a squeeze over a rock to return to the entrance.

Technical Description

None

Dangers

Hookworms in porcupine faeces, occupied by bears.

Outstanding Values

Phreatic rift passage

Geology

Description

Maze-like phreatically formed rifts contolled by at least 3 joint sets. Small, low chambers have formed independent of the joints. Present day stream is seasonal underfit

Rock Type

Rock Age

Limestone

Triassic

Sediments

Sandy soil on floors with much porcupine guano

Speleothems

Common forms

Site Code 13

Biology

Description

Porcupine guano ecosystem. Simple with crickets and huntsman spiders. Many hookworms and used by bears

Identified Species

cricket: huntsman spider: porcupine; bat; bear

Unusual Species

Hookworms - R

Food Supply Routes

Guano

Environment

Description

Near the floor of a heavily forested large, broad valley. Several entrances.

Air Temp C Humidity % Water Temp C Water pH CO2 High % O2 Low % 20 95

Further Data

date - November

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

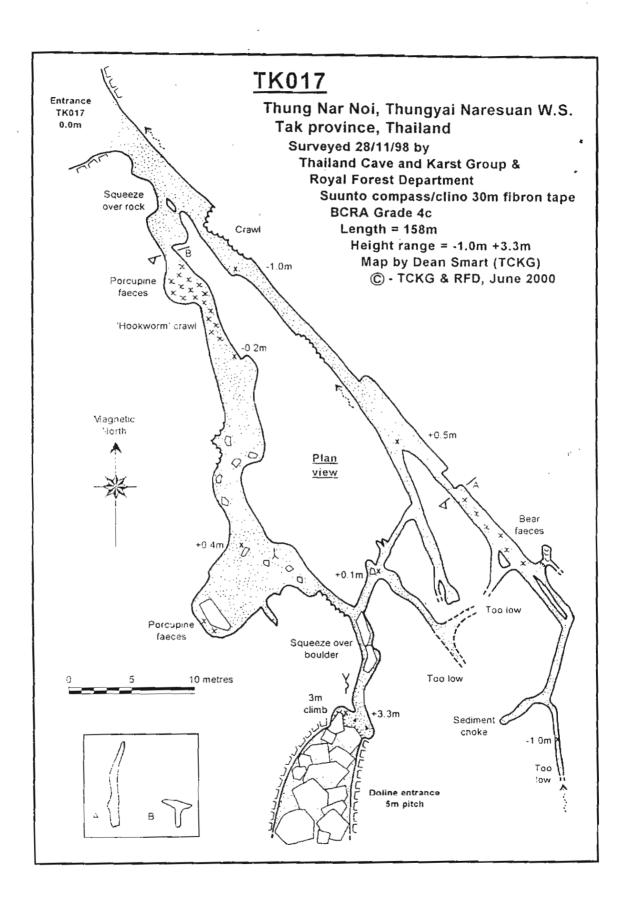
Manager

3.1

High

Royal Forest Department

Impacts



Site Code 14

English Names

Thai Names

TK018

TK018

Location

<i>Province</i> Tak	<i>District</i> Umphang	WS The	North		
Mapsheet 4740 H	UTM Zone 47P	Eastings 488702	Northings 1722314	<i>Latitude</i> 15.580260	Longitude 98.893081
Elevation, m 320	Length, m	Depth,	•		\Tak\TK0018.tif

Access Description

Walk down the Huai Bi valley for 1.5 days to the Mae Khlong Gorge. At the Mae Khlong/Huai Bi confluence (see UTM) walk up Huai Bi for 150m. Entrance is stream sink on West side of gorge

General Description

Stream disappears down tiny cracks. Above is a single, choked chamber.

Technical Description

None

Dangers

Completely flooded in rainy season

Outstanding Values

None

Hydrology

Description

Half of Huai Bi sinks into impenetrable cracks in the SW bank. Resurgence unkown

River System	Stream Name	Catchment Area, km2	Flow, Cumec
Mae Khlong	Huai Bi (Huai Lathaboeng)	180	0.5

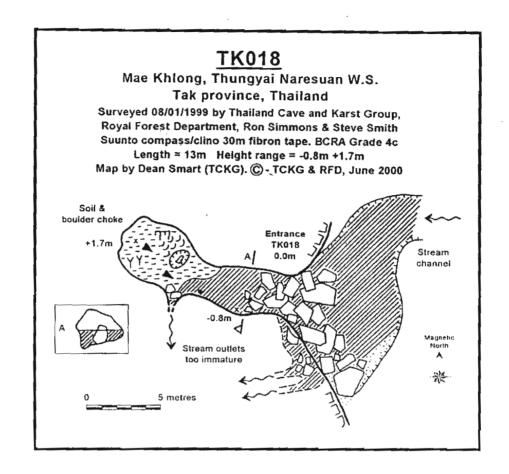
Further Data date - November

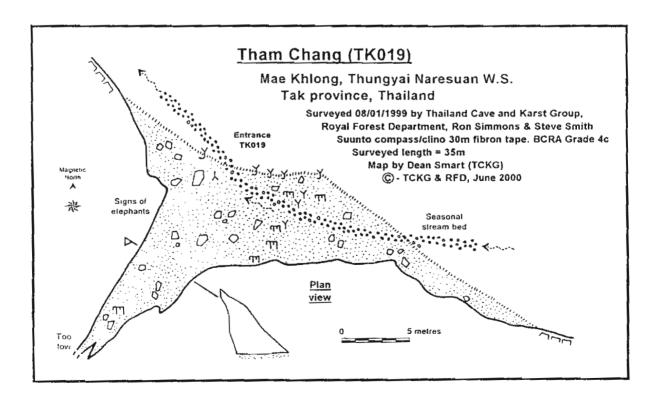
Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification 3.1	Energy Rating	Manager Royal Forest Department	
Impacts	High	Royal Polest Department	-





Site Code 15

English Names

L - :

Thai Names

Tham Chang, TK019

ถ้ำช้าง TK019

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protecti WS Thu	Zone . North		
Mapsheet 4740 II	<i>UTM Zone</i> 47P	Eastings 488792	Northings 1722272	<i>Latitude</i> 15.580260	Longitude 98.893081
Elevation, m	Length, m	Depth,	•		\Tak\TK0019.tif

Access Description

Walk down the Huai Bi valley for 1.5 days to the Mae Khlong Gorge. At the Mae Khlong/Huai Bi confluence (see UTM) walk up Huai Bi for 250m. Entrance is obvious rock shelter on West side of gorge

General Description

Large rockshelter. At the back, a crawl is too low

Technical Description

None

Dangers

None

Outstanding Values

Some stone tools found. Used by elephants

Archaeology

Description

Possible habitation site next to permanent stream. Seasonal flooding may remove or bury artifacts. Stone tools are crude and limestone

Artifacts

stone tools

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification	Energy Rating	Manager
3.1	High	Royal Forest Department
Impacts		
None		

Site Code 16

English Names

Thai Names

Tham Huai Bi, TK020

ถ้ำห้วยบี้ TK020

Location

<i>Province</i> Tak	District Umphang	Protected Area WS Thungyai Naresuan East				Zone • North
Mapsheet 4740 II	<i>UTM Zone</i> 47P	Eastings 488897	<i>Nort</i> : 1722	hings 236	<i>Latitude</i> 15.580260	Longitude 98.893081
Elevation, m 320	Length, m 195	Depth, 4	m	Survey I C:\Cave		\Tak\TK0020.tif

Access Description

Walk down the Huai Bi valley for 1.5 days to the Mae Khlong Gorge. At the Mae Khlong/Huai Bi confluence (see UTM) walk up Huai Bi for 400m. Obvious entrance where Huai Bi resurges at the base of a dry tufa waterfall

General Description

Active stream cave. Wading and scrambling over boulders lead upstream to a high level passage on the left. Continuing up rapids reaches a long deep pool requiring swimming. The stream rises up from a deep sump at the end. Straight ahead enters dry, muddy crawls ending in static sumps. The upper level leads to a small chamber with several tight crawls off.

Technical Description

Some swimming

Dangers

Cave probably floods quickly and severely

Outstanding Values

Active vadose stream cave

Geology

Description

Youthful vadose stream passage guided by small faults with good examples of vadose morphologies, e.g. scallops. A single, short upper level

Rock Type Rock Age

Limestone Triassic

Sediments

Breakdown forms rapids in the stream and mud floors the upper levels

Speleothems

Common forms

Site Code 16

Hydrology

Description

Significant resurgence with large catchment area. Normally, Huai Bi sinks 1km to the East though in the rainy season the stream sink is overpowered and the stream falls down tufa waterfalls to the river 300m below

River System

Stream Name

Catchment Area, km2

Flow, Cumec

П

Mae Khlong

Huai Bi (Huai Lathaboeng)

180

Further Data

date - January

Biology

Description

Active stream cave with large fish. Not studied.

Identified Species

fish - Channa sp

Food Supply Routes

Stream

Environment

Description

Active stream cave shaded in the bottom of a gorge with cool temperature. No airflow.

Air Temp C

Humidity % Water Temp C

Water pH

CO2 High % O2 Low %

.22

20.5

7.2

Further Data date - January

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

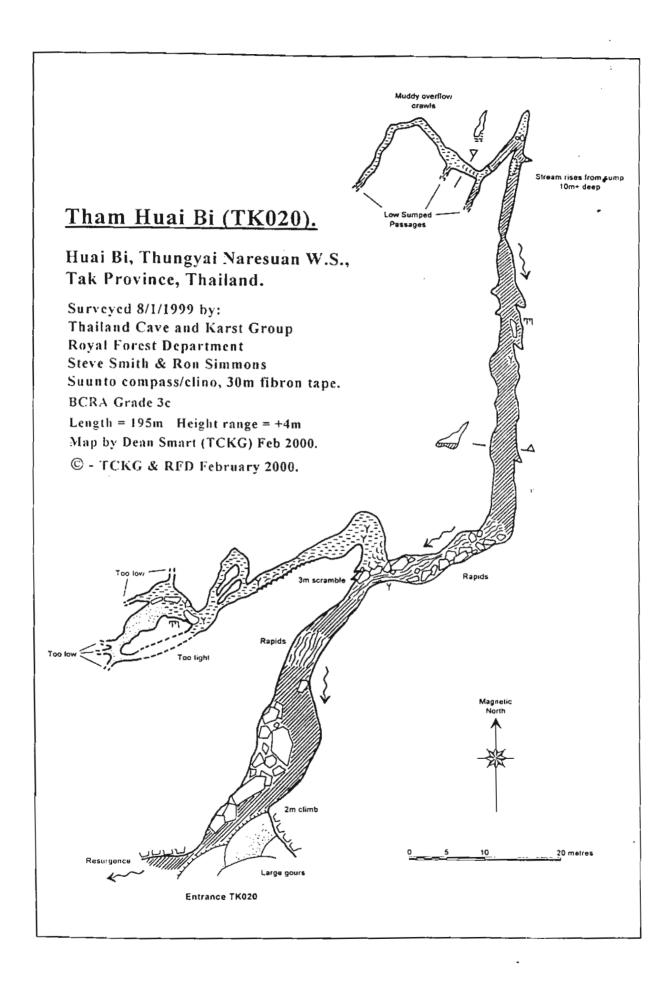
Manager

3.1

High

Royal Forest Department

Impacts



Site Code 17

English Names

Thai Names

Tham Yuthana, TK021

ถ้ำยุทธนา TK021

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protected Area WS Thungyai Naresuan East				Zone North
Mapsheet 4740 II	UTM Zone 47P	Eastings 488050	<i>North</i> 17252	0	<i>Latitude</i> 15.606049	Longitude 98.888526
Elevation, m 370	Length, m 51	Depth, 17		Survey C:\Cave		\Tak\TK0021.tif

Access Description

2 days walk from Thung Nar Noi ranger station and located on the East bank of the Mae Khlong River. Walk down the Huai Bi valley to that stream's confluence with the Mae Khlong. Follow the East bank upriver for 2km. The cave is c.500m before the Huai Wak waterfall and c. 50m above the river. Entrance is large but easily missed.

General Description

Large entrance opens out into the Mae Khlong valley. The cave descends quickly down a slope with a short climb to a mud choke. Water backs up c.13m deep in the rainy season.

Technical Description

None

Dangers

None

Outstanding Values

None

Geology

Description

Large inactive cave formed phreatically

Rock Type

Rock Age

Limestone

Triassic

Sediments

Inwashed soil and boulders becoming increasingly muddy with depth

Speleothems

Common forms; large flowstone boss

Site Code 17

Biology

Description

Rain washes soil into the cave. Used by porcupine and serow

Identified Species

porcupine; serow; cricket

Food Supply Routes

Near Surface; Guano

Environment

Description

Large inactive cave with a single entrance. Cold temp due to shaded location in the bottom of a deep gorge.

Air Temp C Humidity %

Water Temp C

Water pH

CO2 High %

02 Low %

20

81

Further Data

date - January

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification 3.1

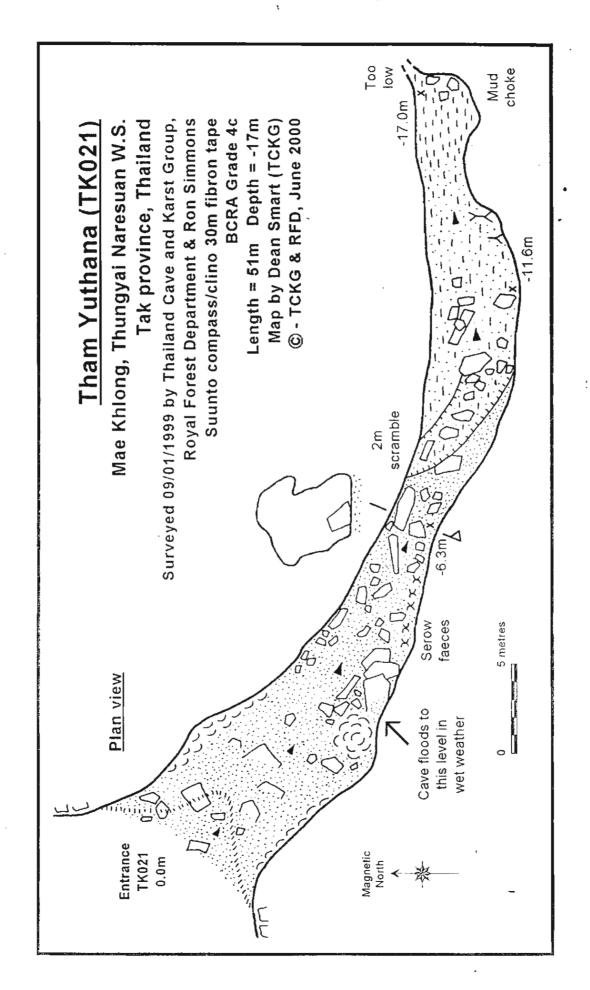
Energy Rating

High

Manager

Royal Forest Department

Impacts



Site Code 18

English Names

Thai Names

Tham Wichian, TK022

ถ้ำวิเชียร TK022

Location

<i>Province</i> Tak	Umphang	Protected Area WS Thungyai Naresuan East			Zone . North	
<i>Mapsheet</i> 4740 II	<i>UTM Zone</i> 47P	Eastings 487808	Northings 1725533	<i>Latitude</i> 15.608539	Longitude 98.886268	
Elevation, m	Length, m	Depth,	•		\Tak\TK0022 tif	ŗ

Access Description

2 days walk from Thung Nar Noi ranger station and located on the East bank of the Mae Khlong River. Walk down the Huai Bi valley to that stream's confluence with the Mae Khlong. Follow the East bank upriver for 3km. The cave is near the confluence of Huai: Wak and the Mae Khlong. Small entrance is difficult to find.

General Description

A small cave with several entrances in a cliff face. Main entrance is small and opens into a room. Left climbs up to more entrances, right leads up a 4m climb to a low crawl. Becomes too low.

Technical Description

None

Dangers

None

Outstanding Values

Some bones, possibly deer or serow inside.

Geology

Description

Small inactive cave formed along a single joint/fault

Rock Type

Rock Age

Limestone

Triassic

Sediments

Sandy soil with some breakdown

Speleothems

Flowstone

Biology

Description

Small cave used by surface mammals

Identified Species

Porcupine; serow

Site Code 18

Palaeontology

Description

Several vertebrae of possibly a small deer

Species Found

Small deer?

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

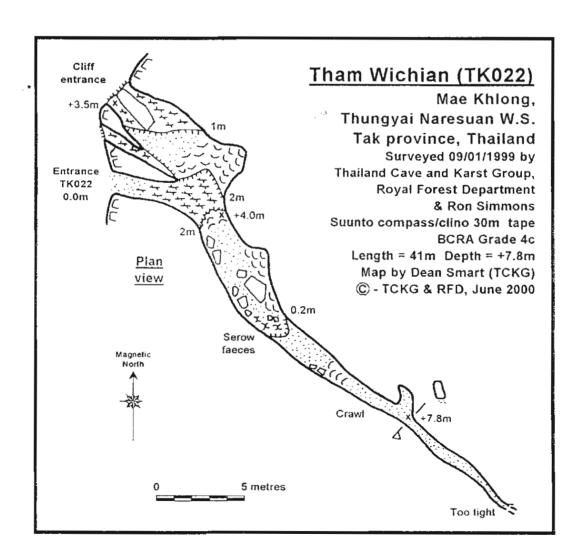
Manager

3.1

Low

Royal Forest Department

Impacts
None



Site Code 19

English Names

Thai Names

TK023

TK023

Location

<i>Province</i> Tak	District Umphang	Protected Area WS Thungyai Naresuan East			Zone North
<i>Mapsheet</i> 4740 II	<i>UTM Zone</i> 47P	<i>Eastings</i> 487908	<i>Northings</i> 1725611	<i>Latitude</i> 15.609239	<i>Longitude</i> * 98.887199
Elevation, m	Length, m	Depth,	m Survey I	File	

Access Description

2 days walk from Thung Nar Noi ranger station and located on the East bank of the Mae Khlong River. Walk down the Huai Bi valley to that stream's confluence with the Mae Khlong. Follow the East bank upriver for 3km. This large spring feeds the Huai Wak waterfall - c. 30m high and terraced by tufa. Follow that stream up until the resurgence is met.

General Description

Large active resurgence, presumably draining the plateau to the East. Water emerges from several places, the highest can be entered by swimming for 30m to a boulder choke.

Technical Description

Swimming necessary

Dangers

Probably prone to flooding

Outstanding Values

Very large resurgence thought to be draining a large area of karst.

Geology

Description

Large resurgence possibly located on a large fault entering the Mae Khlong valley

Rock Type
Limestone

Rock Age

Triassic

Hydrology

Description

Very significant resurgence thought to drain the large karst plateau to the East. Water emerges from several places making flow rate difficult to measure. Catchment area size is estimated

River System

Stream Name

Catchment Area, km2

Flow, Cumec

Mae Khlong

Huai Wak

100

1

Further Data

date - January. Estimated catchment area and flow rate

Site Code 19

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

Manager

3.1

High

Royal Forest Department

Impacts

Site Code 20

English Names

Thai Names

TK024

TK024

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protects WS Thu	Zone . North		
<i>Mapsheet</i> 4740 [[<i>UTM Zone</i> 47P	Eastings 488074	Northings 1725477	<i>Latitude</i> 15.608030	Longitude 98.888748
Elevation, m	Length, m	Depth , i			\Tak\TK0024.tif

Access Description

2 days walk from Thung Nar Noi ranger station and located on the East bank of the Mae Khlong River. Walk down the Huai Bi valley to that stream's confluence with the Mae Khlong. Follow the East bank upriver for 3km. The obvious cave entrance is found in a cliff face, c.100m above the Mae Khlong and c.200m before the Huai Wak waterfall.

General Description

Obvious square entrance in a cliff face reached by a 4m climb. The cave reaches a small room with a large canopy and a red clay floor. A boulder choke is soon reached at the top of a further 3m climb.

Technical Description

Entrance climb is a little tricky

Dangers

Falling off the entrance climb may result in a roll and fall of several hundred metres!

Outstanding Values

None

Geology

Description

Formed in thinly bedded (up to 10cm thick) limestone thin red-grey mudstone layers between. Bedding dip is 42 degrees to SW

Rock Type
Limestone

Rock Age Triassic

Sediments

red clay covers the floor

Speleothems

One large flowstone

Site Code 20

Biology

Description

Fresh bat guano on floor

Identified Species

Bats

Food Supply Routes

Guano

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

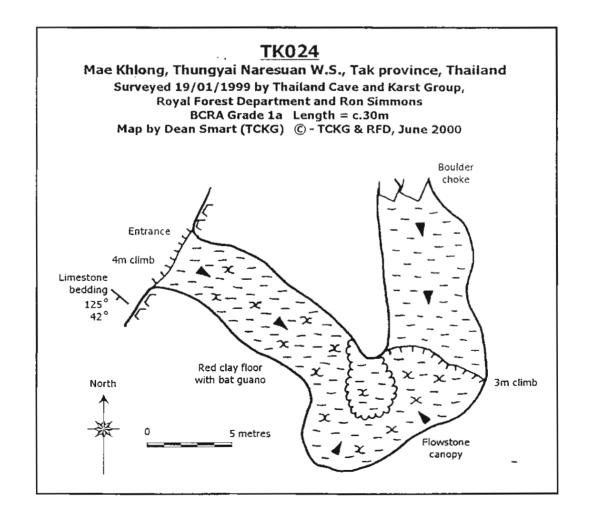
Manager

3.1

Low

Royal Forest Department

Impacts
None



Site Code 21

English Names

Thai Names

Tham Molakot, TK025

ถ้ำมรกต TK025

Location

<i>Province</i> Tak	District Umphang	Protected Area WS Thungyai Naresuan East			<i>Zone</i> North
<i>Mapsheet</i> 4839 IV	<i>UTM Zone</i> 47P	Eastings 505235	<i>Northings</i> 1701597	<i>Latitude</i> 15.392149	<i>Longitude*</i> 99.048782
Elevation, m	Length, m	Depth,	-		
1090	921	22	C:\Cave	Database\Maps\	Tak\TK0025.tif

Access Description

Walk on good footpath for 30 minutes to SW from Huai Nam Khieo ranger station. Find and enter the TK012 entrance of Tham Than Lot located on NW side of the obvious tower after crossing a stream. Walk through that cave and exit via the TK013 entrance on the West side of the hill. Walk a further 30 minutes to the West until a permanent stream is met. Walk upstream to find this huge resurgence entrance.

General Description

Large active stream cave with significant upper levels. The resurgence entrance (TK025) is some 15m high and wide with the stream emerging from the right hand side and flowing across the entrance at the base of a large soil mound. At the top of this mound is an upper level and inlet series. Easy walking upstream passes upper level windows and balconies. Just after scrambling over a small boulder pile, a flowstone on the left can be climber up to a small inlet passage and a crawl to an entrance. Easy walking continues up the main stream passage on gravel banks to a large chamber with the stream entering from under a large flowstone. Climbing up to the right reaches a balcony overlooking the main stream. To follow the main stream, either crawl under the flowstone or (easier) scramble up large gour pools to an awkward 2m climb down the other side. More easy walking follows to the confluence, a junction of two streams and upper level. Daylight entering the main stream sink entrance (TK035) is seen to the left. Straight ahead, a narrow though very tall inlet passage leads to another entrance (TK042). At the top of the soil slope on the left is the entry to an upper that loops around to a balcony overlooking the TK035 entrance. Some good fossils and an outcrop of basic, igneous intrusion are found at the confluence. Climbing up the high soil slope at the resurgence entrance reaches a large upper level with holes back down to the stream. Traversing past these enters a chamber 20m above the stream with an entrance (TK030). The obvious passage straight ahead ends in a flowstone choke with a loop around to return to the chamber. A smaller hole can be climbed to an upper level oxbow 7m above the stream. Near the top of the soil slope an unlikely looking passage drops into an inlet series that ends too low after 50m.

Technical Description

Ropes/ladders needed for the pitches between the various levels, although all can be bypassed.

Dangers

Floods quickly after rain.

Site Code 21

Outstanding Values

Example of multiple phases of development, the upper levels being phreatic and the lower levels vadose. Outcrops of igneous intrusive rocks and good fossils (gastropods and bryozoans) in the limestone. Large speleothems with eg's of flowstone, columns and gour pools. Some straws.

Geology

Description

Excellent example of a phreatic/vadose multi-level cave. Lithology change at 7m from overlying massive to dark, thinly bedded limestone marks change from phreatic to vadose. 2 intersecting faults guide the cave. Basic igneous intrusions at stream level

Rock Type

Rock Age

Limestone

Permian

Sediments

Multi-level cave with varying sediments over a height of 20m. Gravel at stream level with some breakdown. Upper levels have sandy soil mixed with guano.

Speleothems

Large columns in upper levels; straws; popcorn; large gour pools form a bridge over the stream; common forms

Further Data

Bedding dips 25 degrees to north; Brachiopod, Gastropod & coral fossils in limestone

Hydrology

Description

3 separate streams enter and join inside this stream through cave. 1st flows from Tham Phet, 2nd from forest N of the cave and join near the TK035 entrance. 3rd stream enters at resurgence, source is unknown. Stream flows on to Tham Than Lot

River System

Stream Name

Catchment Area, km2

2

Flowe, Cumec

Mae Khlong

0.1

Further Data

date - January

Biology

Description

Rich fauna, especially aquatic species. Most are surface derived with ecology based on stream food supply. Very similar to Tham Phet. Serow use the cave

Identified Species

Shrimp; Fish - Nemacheiline, Balitoridae, Danio & Barb; Serow; Cave Racer Snake; few bats

Unusual Species

Rat - n.sp

Food Supply Routes

Stream; guano

Site Code 21

Environment

Description

Perennially active through cave in a well forested ridge.

Air Temp C Humidity % Water Temp C Water pH CO2 High % O2 Low % 17 93 16.5 8.2

Further Data

Average of 3 measurements - January

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed. Possible sedimentation from nearby fields has now ceased

Classification 3.1

Energy Rating
High

Manager

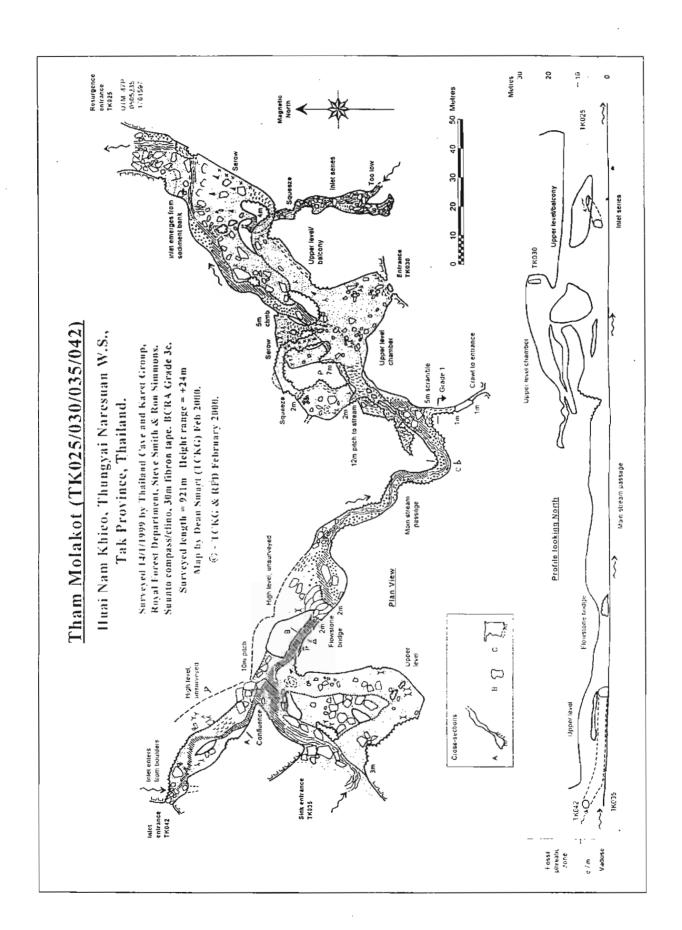
Royal Forest Department

Impacts

Increased Sediment

Impact Sources

Deforestation; Agriculture



Site Code 22

English Names

Thai Names

TK026

TK026

Location

<i>Province</i>	District	WS Th	Zone •		
Tak	Umphang		North		
<i>Mapsheet</i>	<i>UTM Zone</i>	Eastings	Northings	<i>Latitude</i>	Longitude 98.890098
4740 II	47P	488217	1722262	15.578969	
Elevation, m 320	Length, m 20	Depth,			\Tak\TK0026.tif

Access Description

2 days walk from Thung Nar Noi ranger station and located on the South bank of the Mae Khlong River. Walk down the Huai Bi valley to that stream's confluence with the Mae Khlong. Follow the Southern bank downriver for 500m. The large entrance is found in c.30m above the main river.

General Description

Very small cave with a seasonal stream flowing in a skylight at the back and out of the main entrance.

Technical Description

Ropes needed for the skylight pitch.

Dangers

None

Outstanding Values

None

Geology

Description

Formed on the side of a valley

Rock Type

Rock Age

Limestone

Triassic

Sediments

Inwashed soil

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

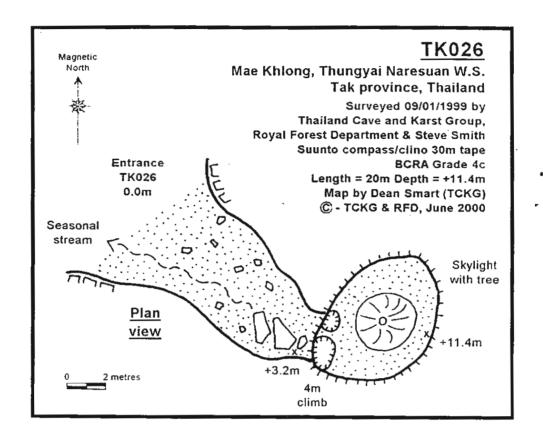
Manager

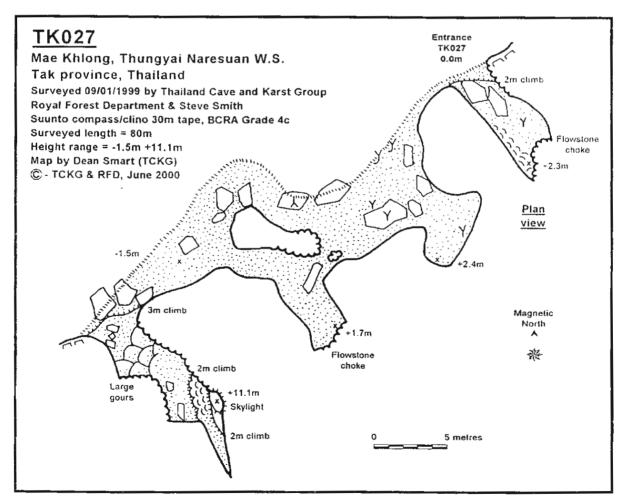
3.1

High

Royal Forest Department

Impacts





Site Code 23

English Names

Thai Names

TK027

TK027

Location

<i>Province</i> Tak	District Umphang	Protected Area WS Thungyai Naresuan East				Zone . North
<i>Mapsheet</i> 4740 II	<i>UTM Zone</i> 47P	Eastings 487537	<i>North</i> 17217	0	<i>Latitude</i> 15.574749	Longitude 98.883758
Elevation, m	Length, m 80	Depth , 13		Survey . C:\Cave		Tak\TK0027.tif

Access Description

2 days walk from Thung Nar Noi ranger station and located on the South bank of the Mae Khlong River. Walk down the Huai Bi valley to that stream's confluence with the Mae Khlong. Follow the Southern bank downriver for 1km. This cave is located directly above a small resurgence at Huai Kaet.

General Description

Series of small caves located above a resurgence. Two caves end at flowstone chokes, while the third ends at a small skylight.

Technical Description

None

Dangers

None

Outstanding Values

Some large gour pools

Geology

Description

3 small caves with large flowstones and gour pools. Formed above an active resurgence.

Rock Type Rock Age
Limestone Triassic

Sediments

Inwashed soil and large breakdown

Speleothems

Large gour pools; common forms

Hydrology

Description

Small resurgence for Huai Kaet, located below the cave. Source of water unknown

River System Stream Name Catchment Area, km2 Flow, Cumec Mae Khlong Huai Kaet

Site Code 23

1. . .

Environment

Description

Cool and dry. Near the floor of a deep valley and near surface

Air Temp C Humidity % Water Temp C Water pH CO2 High % O2 Low % 22.5 66.5

Further Data date - January

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

Manager

3.1

High

Royal Forest Department

Impacts

Site Code 24

English Names

Thai Names

TK031

TK031

Location

<i>Province</i>	District	Protec	Zone		
Tak	Umphang	WS T	North •		
Mapsheet	UTM Zone	Eastings	Northings	<i>Latitude</i> 15.399829	Longitude .
4839 IV	47P	506588	1702447		99.061393
Elevation, m	Length, m	Depth, m	Survey File		
1120	69	9	C:\Cave Databas	e\Maps\Tak\TK(0031.tif

Access Description

Follow a good footpath South from Huai Nam Khieo ranger station for 15 minutes. On the N side of the obvious small tower on the left of the path are two obvious entrances, one above the other. TK031 is the upper cave.

General Description

The single meandering passage slopes gently uphill, eventually becoming too low.

Technical Description

None

Dangers

Bears use the cave

Outstanding Values

None

Geology

Description

A single phreatic passage following the same fault as TK032 though 20m above

Rock Type

Rock Age

Limestone

Permian

Sediments

Sandy soil with guano

Speleothems

Common forms

Biology

Description

Little fauna. Bears use the cave and a rat nest was found

Identified Species

Unusual Species

Bear; bat

Rat - n.sp

Food Supply Routes

Guano

Site Code 24

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

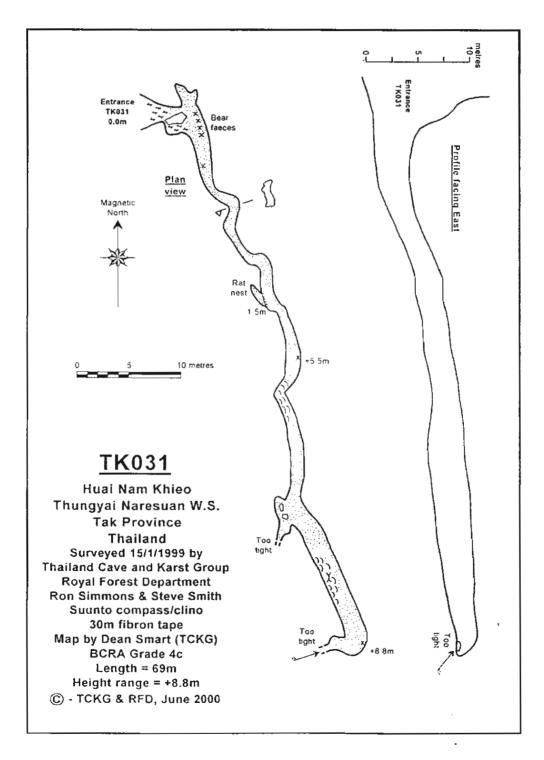
Classification 3.1

Energy Rating
Low

Manager

Royal Forest Department

Impacts
None



Site Code 25

English Names

Thai Names

TK032

TK032

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protect WS Th	Zone . North		
<i>Mapsheet</i> 4839 IV	UTM Zone 47P	Eastings 506588	Northings 1702447	<i>Latitude</i> 15.399829	Longitude 99.061393
Elevation, m	Length, m 66	Depth,	•		\Tak\TK0032 tif

Access Description

Follow a good footpath due South from Huai Nam Khieo ranger station for 15 minutes. On the N side of the obvious small tower on the left of the path are two obvious entrances, one above the other. TK032 is the lower cave.

General Description

15m inside the large rift type entrance, the cave turns to the right and climbs uphill. The tall rift continues with oxbows in the left wall to where it closes down at a flowstone cascade. Squeezing past this leads to more tall rift ending at two climbs up of 3m and 5m. These have not been climbed.

Technical Description

None

Dangers

None

Outstanding Values

sub-fossil bones in sediment

Geology

Description

A single phreatic passage following the same fault as TK031 though 20m below. Some short oxbows. Bedding dips 30 degrees to SSW

Rock Type

Rock Age

Limestone

Permian

Sediments

Sandy soil with guano, some stuck to the wall at the end of the entrance chamber. Large breakdown in the entrance.

Speleothems

Large flowstone

Site Code 25

Biology

Description

Guano based ecology with tree roots at the entrance

Identified Species

Bat - Aselliscus stoliczkanus

Food Supply Routes

Guano: roots

Palaeontology

Description

One sub-fossil bone in sediment stuck to the wall in the entrance chamber. Species unidentified

Environment

Description

Short, dry cave near the summit of a small tower with little forest. Cave has one entrance.

Air Temp C Humidity % Water Temp C Water pH CO2 High % O2 Low % 20 86

Further Data date - January

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification Energy Rating Manager 3.1

Royal Forest Department Low

Impacts None

TK032 Huai Nam Khieo, Thungyai Naresuan W.S., Tak Province, Thailand Surveyed 15/1/1999 by Thailand Cave and Karst Group, Royal Forest Department, Ron Simmons & Steve Smith. Suunto compass/clino 30m fibron tape. Map by Dean Smart (TCKG) June 2000. BCRA Grade 4c. Length = 66m Height range = +14.8m. (C) - TCKG & RFD, June 2000 Entrance TK032 0.0កា Plan <u>view</u> Bat Oxbows guano Profile facing East Limestone 285 bedding 30° Sub-fossil bones +9 3m Magnetic 3m scramble North 3m scramble up flowstone Squeeze 10 metres

Site Code 26

English Names

Thai Names

TK033

TK033

Location

<i>Province</i>	<i>District</i>	Protect	Zone		
Tak	Umphang	WS Th	North *		
<i>Mapsheet</i>	UTM Zone	Eastings	<i>Northings</i>	<i>Latitude</i> 15.400050	Longitude-
4839 IV	47P	506644	1702471		99.061920
Elevation, m	<i>Length, m</i> 36	Depth, 10	•		\Tak\TK0033.tif

Access Description

Follow a good footpath due South from Huai Nam Khieo ranger station for 20 minutes. On the S side of the obvious small tower on the left of the path is this large cave entrance.

General Description

To the right side of the broad, low entrance, a scramble down boulders leads to a 4m climb in a rift. At the bottom is a low bedding plane chamber that finishes in breakdown.

Technical Description

Dangers

None

None

Outstanding Values

Used extensively by porcupines

Geology

Description

Entrance rift formed along a fracture behind the cliffline. Drops into wide, low bedding plane

Rock Type

Rock Age

Limestone

Permian

Sediments

Much breakdown in lower level and at entrance

Speleothems

Common forms

Biology

Description

Small cave used extensively by porcupines, much guano. Many large snail shells in lower level. Roots near the entrance

Identified Species

Food Supply Routes

Porcupine; land snail

Guano

Site Code 26

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

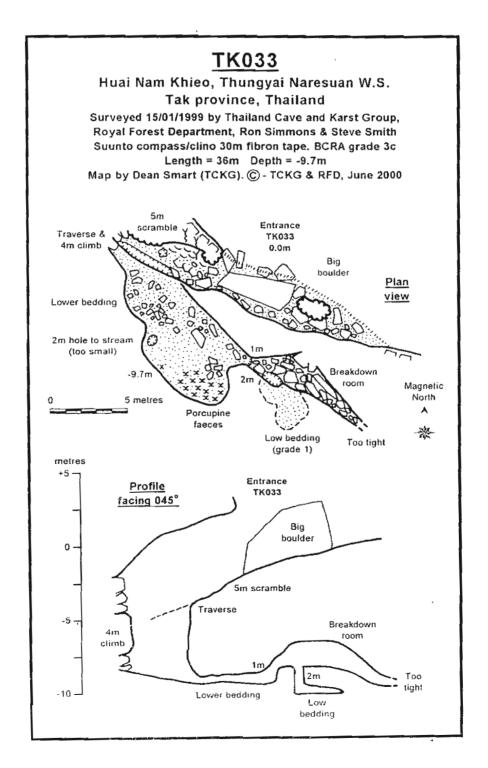
Classification 3.1

Energy Rating

Manager

Low Royal Forest Department

Impacts
None



Site Code 27

English Names

Thai Names

Tham Seua, TK034

ถ่าเสื้อ TK034

Location

<i>Province</i> Tak	District Umphang	Protects WS The	Zone . North		
<i>Mapsheet</i> 4839 IV	<i>UTM Zone</i> 47P	Eastings 506546	Northings 1702173	<i>Latitude</i> 15.397350	Longitude 99.060997
Elevation, m	Length, m 952	Depth, 27			\Tak\TK0034.tif

Access Description

Follow a good footpath due South from Huai Nam Khieo ranger station for 15 minutes. On the SW side of the obvious small tower on the left of the path is this large, obvious entrance.

General Description

A very complicated maze type cave whose description here is inadequate and only the main routes can be mentioned. From the large entrance chamber, several routes lead off. These are described from left to right (looking in). An obvious walking passage soon reaches a sediment bridge. Beyond this the passage gets smaller and crawling opens up at a small chamber. Straight ahead, a walking sized rift gradually becomes narrower until a 1.5m climb and a sharp right hand bend. The very tight crawl at the top soon enlarges at a chamber with several ways on. Straight ahead soon closes as does the passage leading back. A steep scramble up flowstone to the right leads to a T-junction. Right goes to various looping passages and a very tight crawl to the TK045 entrance. Left enters a low chamber with much porcupine faeces. A low crawl in the left side exits at the TK046 entrance. Straight on reaches another 3 way junction. Right ends at a round room with a 10m high aven in the roof. Left leads to a complex series of looping passages with several entrances (collectively called TK044). By taking the most obvious passage downwards to the right, a 4m climb down into a room with a flowing stream is reached. The stream quickly sumps in both directions. A 2m climb up from near here enters a high rift passage ending in a flowstone choke after 40m. The largest passage leading off from the entrance chamber climbs up 3m in a large rift before rejoining the previous route at the first small chamber. Along the right hand wall of the entrance chamber, at least 5 passages lead off. These narrow canyon type passage divide and rejoin several times. Eventually the explorer will find a 3m climb up to a flowstone slope. a squeeze and large passage to an entrance. An alternative route leads to a chamber with a draughting 4m climb.

Technical Description

Some squeezing and tight crawling required. Some of the climbs are awkward and route finding is difficult. The 4m climb to the draughting passage needs climbing gear.

Dangers

Some crawls are very tight. Getting lost is a possibility although an entrance is never usually far away.

Site Code 27

Outstanding Values

Superb example of complex, multiple phase phreatic and vadose cave development. Perhaps the most complex cave in Thailand. Excellent keyhole passages in the narrow canyons. Some prehistoric material including stone tools and some pottery in the entrance chamber and animal bones of unknown age.

Geology

Description

Very complex 3D maze cave formed along the edge of a tower. Mostly phreatic in origin though the meandering 'canyons' East of the entrance are classic keyholes. Examples of most passage type. A fault guides a large rift at the northern end

Rock Type

Rock Age

Limestone

Permian

Sediments

Sandy soil floors most of the cave. Some breakdown especially in entrance areas. One calcified sediment bridge.

Speleothems

Common forms, small helictites, popcom in some areas.

Hydrology

Description

Small stream flows through part of the cave, sumped at both ends. Origin & destination unknown

River System

Stream Name

Catchment Area, km2

Flowe, Cumec

0

Mae Khlong

Further Data date - January

Biology

Description

Little studied biologically. Fair number bats and porcupines provide guano. Strong draughts between the many entrances. Very short section of stream with catfish

Identified Species

Bats; porcupine - Atherurus macrourus, catfish

Unusual Species

Rat - n.sp; White isopods - R

Food Supply Routes

Guano: draughts; stream

Site Code 27

Palaeontology

Description

Main entrance chamber contains a few bones probably of bear and deer. One limb bone has been sharpened, either deliberately or by an animal gnawing

Species Found Deer; Bear

Archaeology

Description

Large dry entrance chamber with a watersource 1km away. >20 crude limestone tools and small pottery sherds from several pots found. Bear and deer remains. One limb bone was sharpened at the end.

Artifacts

stone tools; cord-marked pottery; burnished pottery; animal remains

Environment

Description

Long, complex cave with many entrances, located in a hill with little forest cover. Cool air temperatures reflect cold season timing.

Air Temp C Humidity % Water Temp C Water pH CO2 High % O2 Low % 17 89

Further Data

average of 9 measurements - January, February

Management

Description

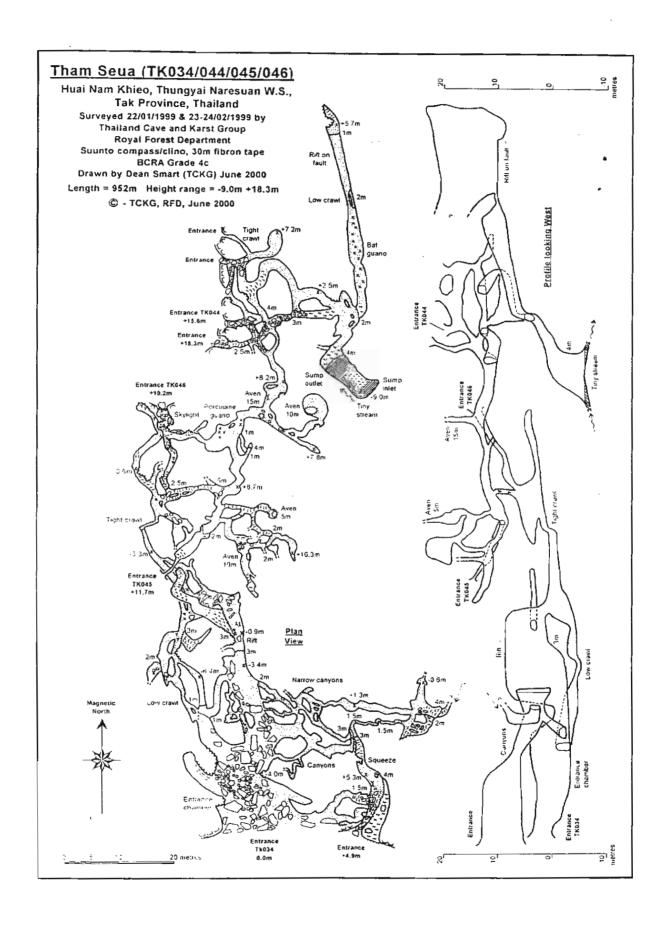
Remote, within a wildlife sanctuary and protected. Very unlikely to be developed. Guano extraction has now ceased

Classification Energy Rating Manager
3.1 High Royal Forest Department

Impacts

Sediment Disturbance

Impact Sources
Resource Extraction



Site Code 28

English Names

Thai Names

Tham Phet, TK036

ถ้าเพชร TK036

Location

<i>Province</i> Tak	District Umphang	Protected Area WS Thungyai Naresuan East				Zone North -
<i>Mapsheet</i> 4839 IV	<i>UTM Zone</i> 47P	Eastings 504832	<i>North</i> 1701	0	<i>Latitude</i> 15.390689	<i>Longitude</i> 99.045028
Elevation, m	Length, m	Depth,		Survey A		\Tak\TK0036 tif

Access Description

Walk on good footpath for 30 minutes to SW from Huai Nam Khieo ranger station. Find and enter the TK012 entrance located on NW side of the obvious tower after crossing a stream. Walk through that cave and exit via the TK013 entrance on the West side of the hill. Walk a further 30 minutes to the West until a permanent stream is met. From here, either follow the stream up, through TK025 and TK035 to this resurgence entrance at the upstream end of the big doline. Or, cross the stream and climb up and over the hill on a good footpath before dropping down the stream in the doline and finding this resurgence entrance.

General Description

A large active stream through cave with extensive upper levels. From the resurgence entrance. TK036, easy walking in a passage 5m high and wide, leads around a bend to where the passage enlarges dramatically to 20m high and 10m wide. The upper levels enter here 6m above the stream. Continuing at stream level meanders around several bends for some 150m to a flowstone bridge. Soon after crawling over this the stream passage becomes a low wet crawl before exiting at the sink entrance of TK037. At the start of the wet crawl is a 2m climb on the right. This leads to an upper level and a large entrance beside the sink. From the upper level, a 3m climb up enters another level, from which a further 3m climb reaches the main upper levels. Straight ahead opens up into the main upper level chamber and the TK041 entrance. Right is easy walking past a passage on the left leading back to the main chamber, to an entrance, TK038. Scrambling down to the left here reaches a small chamber with several passages heading off and the TK039 entrance. One passage climbs 4m up boulders to TK040. The other passages soon end. Off the main chamber, a low bedding plane can be entered that becomes too low after 25m. At the bottom end of the main chamber, the stream is seen flowing along a canyon 6m deep. The ledge above this peters out, but a large passage to the right reaches another balcony further downstream. Scrambling up and left from here oxbows around back to a 15m pitch into the main chamber. Walking along the balcony, the cave opens up at a breakdown room and a point where it is possible to climb down to the stream. Huge flowstone forces the explorer down to the edge of the balcony and a slippery traverse on flowstone leads to a small room with termites. To the left of the stream sink entrance, a narrow rift can be entered. Tight crawls and a squeeze eventually open up after 40m into a small chamber - the Lair of the Porcupine.

Site Code 28

Technical Description

A lot of climbing is required between the levels. Some pitches require ropes or ladders. A few tight squeezes.

Dangers

The streamway floods quickly and dramatically. Care is needed on some of the climbs. The Lair of the Porcupine is tight.

Outstanding Values

Excellent example of a multiple phase cave. The upper levels are phreatic and the present streamway is vadose. Varied sediments in all levels.

Geology

Description

Excellent e.g of multi-level cave, 5 levels +. Lithology change at 6m from overlying massive to dark, thinly bedded limestone marks change from phreatic to vadose. N-S fault guides cave. E-W bedding strike influence at stream level. Pinnacles in TK041 ent

Rock Type

Rock Age

Limestone

Permian

Sediments

Found at every level of the cave and variable ranging from large cobbles to sand in the lower levels and reddish soil in the higher parts.

Speleothems

Common forms; large flowstone; straws; flowstone bridges in stream passage and Lair of Porcupine

Further Data

Bedding dips 20 degrees to SE. Small basic dike in stream bed 30m downstream from TK036.

Hydrology

Description

Through stream cave carrying water collected on sedimentary rocks to the West. Water flows on to Tham Molakot

River System

Stream Name

Catchment Area, km2

Flow, Cumec

Mae Khlong

1.5

0.1

Further Data

date - January

Site Code 28

Biology

Description

Rich fauna, especially aquatic species. Most are surface derived with ecology based on stream food supply. Very similar to Tham Molakot. Roots enter the Lair of the Porcupine and termites inhabit one room with red soil. Used by serow

Identified Species

Shrimp; fish - 2 loach sp, Danio; Scutigera; porcupine; serow; bats - Rhinolophus sp, Aselliscus stoliczkanus; termite

Food Supply Routes

Stream; guano; draught; roots

Environment

Description

Perennially active through cave in a well forested ridge.

Air Temp C Humidity W Water Temp C Water pH CO2 High % O2 Low % : 8.3 17 90 16.8

Further Data

Average of 3 measurements - January

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed. Possible sedimentation has now ceased

Manager Classification Energy Rating 3.1

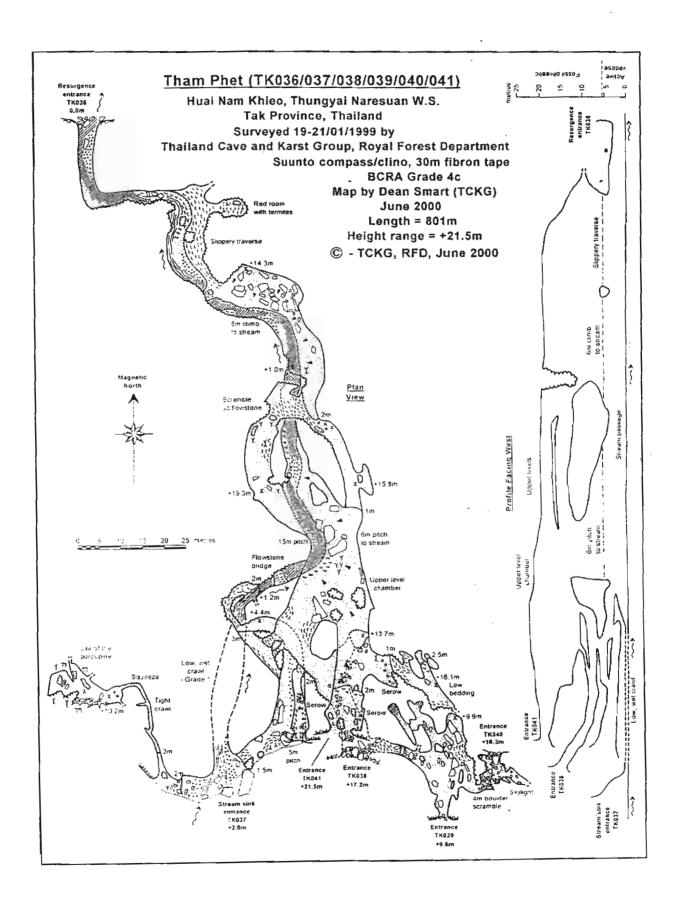
Royal Forest Department High

Impacts

Increased Sediment

Impact Sources

Deforestation; Agriculture



Site Code 29

English Names

Thai Names

Tham Tao, TK043

ถ้าเต่า TK043

Location

<i>Province</i> Tak	<i>District</i> Umphang	WS Thungyai Naresuan East			North
<i>Mapsheet</i> 4839 IV	<i>UTM Zone</i> 47P	Eastings 505732	<i>Northing</i> 1701593	•	Longitude 99.053421
Elevation, m 1080	Length, m	Depth,		rvey File Cave Database\Maps	s\Tak\TK0043.tif

Access Description

Walk on good footpath for 30 minutes to SW from Huai Nam Khieo ranger station. Find and enter the TK012 entrance located on NW side of the obvious tower after crossing a stream. Walk through that cave and exit via the TK013 entrance on the West side of the hill. Walk a further 30 minutes to the South around the large tower. This cave is found on the S side just above a small stream sink and old field.

General Description

Really two caves located next to each other. The left hand, obvious entrance drops down large boulders to a room partitioned by columns (The Turtle). Passing through these the cave lowers to a crawl ending in a stalactite grill with a strong draught. A hole in boulders at the left side of this entrance climbs down 3m into a chamber with breakdown (Beneath the Turtle). 10m to the right of the obvious entrance is a small hole in boulders. Scrambling down here reveals a larger room with many large speleothems (Beside the Turtle). A crawl at the back becomes too low. By squeezing down through a hole, a lower chamber is reached with low passages leading off (Bottom of the Turtle).

Technical Description

None

Dangery

Some of the boulder are loose

Outstanding Values

Complete turtle carapace and many bones of other animals

Site Code 29

Geology

Description

Small cave with geology masked by massive speleothem growth and breakdown. Low, wide bedding planes

Rock Type

Rock Age

Limestone

Permian

Sediments

Large breakdown in entrance; sand covering floor of upper parts with more muddy soils in lower levels

Speleothems

Heavily decorated for a small cave; common forms; large flowstones and columns in 'Beside the Turtle'; straws in lower parts

Hydrology

Description

Tiny stream flowing from forest to SW sinks just below cave. Impenetrable and destination unknown

River System

Stream Name

Catchment Area, km2

Flow, Cumec

0.5

Mae Khlong

Further Data data - January

Palaeontology

Description

Many bones and teeth of a variety of animals in entrance chamber though no skulls. Also, a near complete carapace of a large tortoise (CL = 45cm)

Species Found

Deer; Small Cat; Rodent; Bat; Asian Giant Tortoise - Manouria emys

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

Manager

3.1

Low

Royal Forest Department

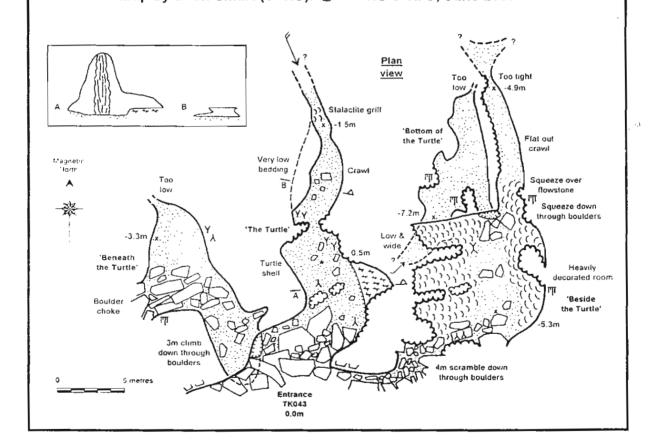
Impacts

Tham Tao (TK043)

Huai Nam Khieo, Thungyai Naresuan W.S. Tak province, Thailand

Surveyed 21/01/1999 by

Thailand Cave and Karst Group & Royal Forest Department Suunto compass/clino 30m fibron tape. BCRA grade 4c
Length = 100m Depth = -7.2m
Map by Dean Smart (TCKG). © - TCKG & RFD, June 2000



Site Code 30

English Names

Thai Names

TK047

TK047

Location

<i>Province</i> Tak	Umphang	WS Thungyai Naresuan East			Zone • North
<i>Mapsheet</i> 4839 IV	UTM Zone 47P	Eastings 506421	<i>Northings</i> 1701544	<i>Latitude</i> 15.391670	Longitude 99.059837
Elevation, m	Length, m	Depth,	m Survey I	File	
1080	26	6	C:\Cave	Database\Maps	Tak\TK0047.tif

Access Description

Follow the good footpath South from Huai Nam Khieo ranger station. After c.1 hours walk a low

limestone ridge is met. This small cave is found on the East side.

General Description

Straight in from the entrance ends quickly. Right leads to a climb and a crawl ending in flowstone.

Technical Description

None

Dangers

None

Outstanding Values

Sediment roof and large snail shells.

Geology

Description

Tiny cave with interesting sediments stuck to the roof. Broken speleothem breakdown

Rock Type

Rock Age

Limestone

Permian

Sediments

inwashed soil stuck to the roof and on floor; breakdown is blocks of broken speleothem

Speleothems

flowstone

Palacontology

Description

Small cave with hundreds of large snail shells in sediments stuck to the roof.

Species Found

Land Snail

Site Code 30

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

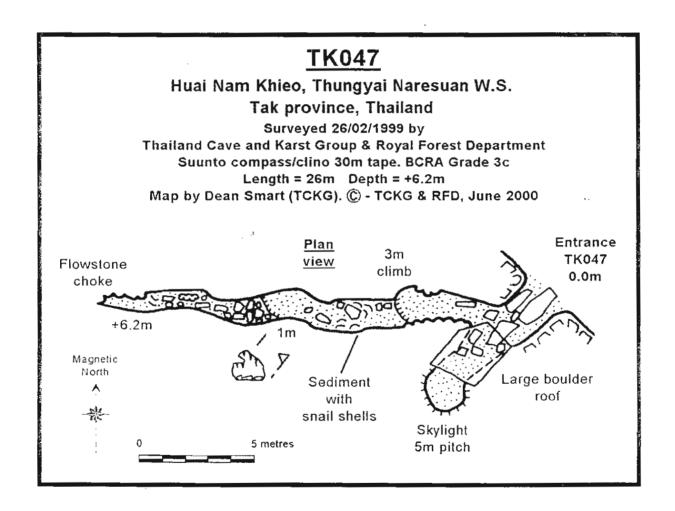
Manager

3.1

Low

Royal Forest Department

Impacts



Site Code 31

1.

English Names

Thai Names

TK048

TK048

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protected Area WS Thungyai Naresuan East			Zone * North	
<i>Mapsheet</i> 4839 IV	UTM Zone 47P	<i>Eastings</i> 506184		things 1516	<i>Latitude</i> 15.391409	<i>Longitude</i> 99.057632
Elevation, m 1080	Length, m 125	Depth,	m	Survey .		\Tak\TK0048 tif

Access Description

Follow the good footpath South from Huai Nam Khieo ranger station. After c.1 hours walk a low

limestone ridge is met with grassland surrounding it. This large, obvious entrance is on the West side of the ridge.

General Description

Very wide entrance gains an equally wide bedding passage that oxbows around and out of the cliff 30m beyond. A small stream outlet is too immature.

Technical Description

None

Dangers

None

Outstanding Values

Elephants use the cave

Geology

Description

Formed by near static, very aggressive marsh water. At least 5 different levels of notching with the wide, low bedding plane main passage being 1 level. Geological structure is of secondary importance to marsh level. The present stream is underfit

Rock Type Rock Age
Limestone Permian

Sediments

Stream channel is floored with small gravel and runs between sand and mud banks 1m high.

Speleothems

Common forms; some small straws and helictites

Site Code 31

Hydrology

Description

Seasonal stream sink for water flowing from hills to south. Stream is underfit and its destination is unknown

River System

Stream Name

Catchment Area, km2

Flow, Cumec

Mae Khlong

0.75

0

Further Data date - February

Biology

Description

Surface based fauna. The rare bat, Ia io roosts here and the entrance is used by elephants

Identified Species

elephant

Unusual Species

bat - Ia io (R)

Food Supply Routes

Stream; near surface

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

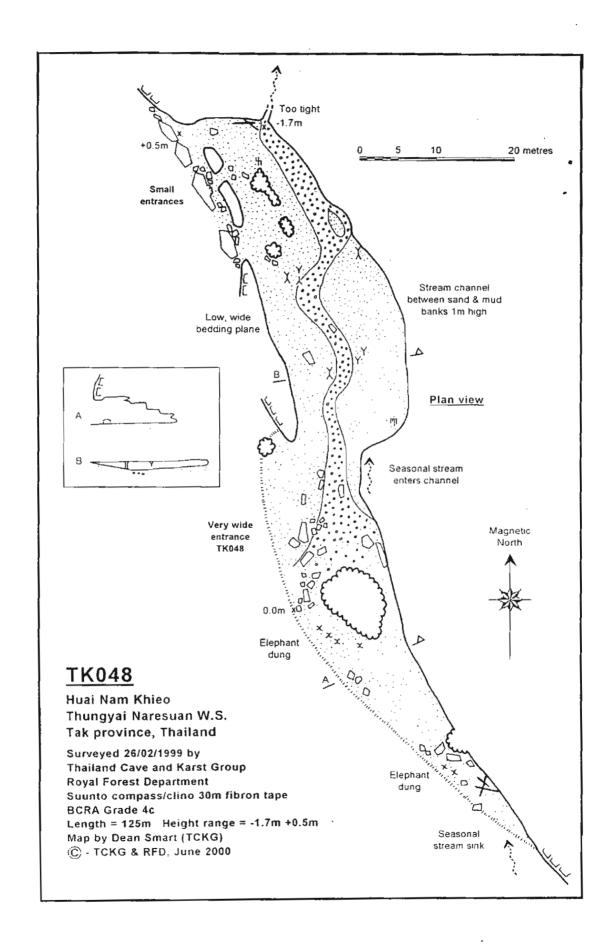
Manager

3.1

High

Royal Forest Department

Impacts



Site Code 32

English Names

Thai Names

Tham Mor, TK049

ถ้ำหม้อ TK049

Location

<i>Province</i> Tak	District Umphang	WS Thungyai Naresuan East			Zone North		
<i>Mapsheet</i> 4839 [V	<i>UTM Zone</i> 47P	Eastings 504972	<i>North</i> 17026	9	<i>Latitude</i> 15.401339	<i>Longitude</i> * 99.046333	
Elevation, m 1070	Length, m 1139	Depth,		Survey F C:\Cave	File Database\Maps'	\Tak\TK0049.t	if

Access Description

Walk on good footpath for 30 minutes to SW from Huai Nam Khieo ranger station as for TK012. Upon reaching that cave, turn right and walk North for a further 30 minutes. Find the obvious seasonal stream gulley and follow it downstream to this stream sink entrance.

General Description

Seasonally active stream cave with very complex upper levels. The stream sink entrance, TK049, has an upper level entrance and a lower rift taking the stream. The stream passage continues straight and narrow for 50m. A short series of parallel rifts opens up again into tall rift passage following the same fault as before. The stream passage now becomes smaller and meanders a little until a large upper level breaks into the roof and the TK028 entrance appears. The upper levels are very complex and only a brief description is given here. Entering via TK049, a passage on the left leads to TK055. Straight ahead and right, drops down a 2m climb to a very wide passage. This passage becomes wider and turns a bend before reaching the TK029 and TK054 entrances. At the bend, a 3m climb enters a very tight crawl leading to another entrance, TK058, and a 5m pitch to a short lower level. At the start of the wide passage, opposite the 2m climb down, a 1m climb up opens out into a chamber above the stream passage. Twin 8m pitches drop down to stream level. Going off left, 2 routes meet at TK056 and a short loop to TK057. By entering the other passage at TK057 a series of rifts and squeezes rejoin the roof of the main stream passage some 50m downstream of the chamber. Stepping across to the balcony on the other side reveals a walking sized passages and a 4 way junction. Left ends at the TK053 entrance, straight ahead ends at a flowstone filled room with a skylight and right contains a tight crawl and a 4m climb down into the chamber above the stream passage. The rest of the upper levels are accessed from the downstream end of the cave. 30m in from the entrance a small passage on the right opens up to reveal TK059. The upper level continues for another 30m to where an 8m pitch into the stream passage stops progress. Some prehistoric pottery was found here.

Technical Description

Vertical equipment is needed on the pitches between levels, although all can be bypassed. A 10m ladder is needed for the 5m pitch into the lower level at TK058. Squeezing and crawling is required, some of it very tight.

Site Code 32

Dangers

The stream passages flood quickly in wet weather. Route finding in the upper levels is difficult, although it would be difficult to get lost. Some of the squeezes are very tight, especially the crawl to TK058.

Outstanding Values

Excellent example of a cave with multiple phases of development, both phreatic and vadose. The phreatic upper levels reach a maze-like complexity and display good examples of phreatic morphology. Contains a single (broken) prehistoric pot.

Geology

Description

Very complex cave with phreatic and vadose passages. Strong NW-SE fault guides the main phreatic upper level and vadose stream passage which form a classic keyhole. Maze-like away from the fault, lacking any trend. At least 2 levels of development

Rock Type

Rock Age

Limestone

Permian

Sediments

Gravel floors the streamway. Upper levels have sand and inwashed soil. Some good false floors in upper side passages. Large scale breakdown in entrances.

Speleothems

Common forms; large gour pools and flowstone bridges; some straws

Hydrology

Description

Normally dry. In very wet weather, floodwater diverted North from Tham Than Lot flows through this cave

River System

Stream Name

Catchment Area, km2
4

Flow, Cumec
0

Mae Khlong

Further Data

date - April

Biology

Description

Not fully investigated. Stream based ecology in lower level, with guano and wind based in upper parts. Many bats. Used by porcupines and serow.

Identified Species

Porcupine; serow; bats - Aselliscus stoliczkanus, large Vespertilionid (Ia io?)

Food Supply Routes

Stream; guano; draught

Site Code 32

Archaeology

Description

Single. large cord-marked pot (c.50cm rim diameter) on a ledge in the upper level. Broken into several large sherds, some having fallen into the stream passage below.

Artifacts

cord-marked pottery

Environment

Description

Seasonally active through cave located in a thinly forested ridge in a lowland area with poor drainage. 100% humidity

Air Temp C Humidity % Water Temp C Water pH CO2 High % O2 Low % 20 100

Further Data

average 2 measurements - April, May

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed. Possible sedimentation from nearby fields now ceased

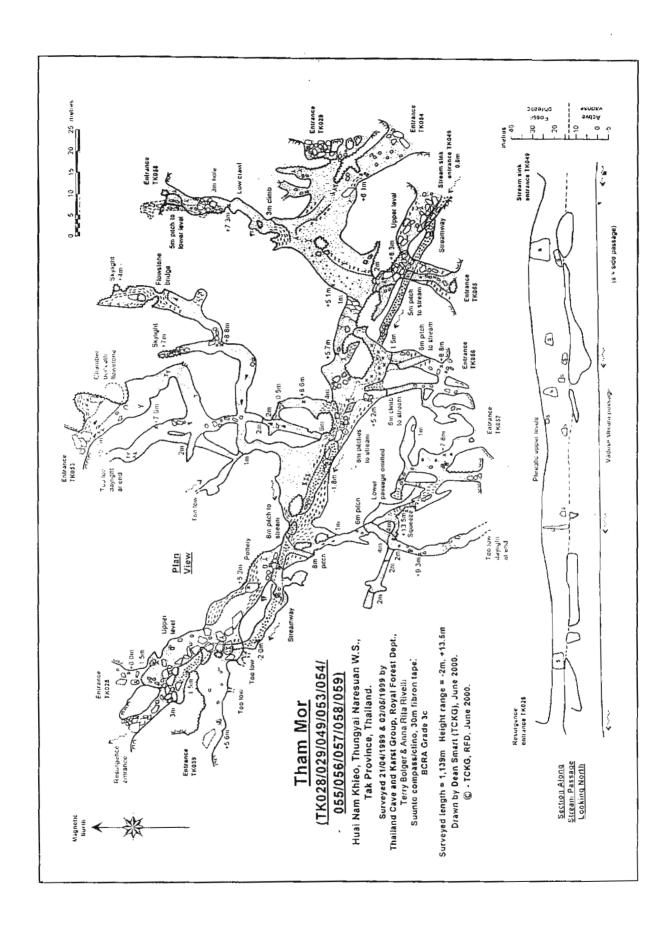
Classification Energy Rating Manager
3.1 High Royal Forest Department

Impacts

Increased Sediment

Impact Sources

Deforestation; Agriculture



Site Code 33

English Names

Thai Names

TK050

TK050

Location

Province Tak	District Umphang	Protected Area WS Thungyai Naresuan East			Zone North	
Mapsheet 4740 II	UTM Zone 47P	Eastings 497850		things 1677	<i>Latitude</i> 15.600830	<i>Longitude</i> * 98.979942
Elevation, m 880	Length, m 150	Depth ,	m	Survey A		\Tak\TK0050.tif

Access Description

Drive South along the track from Utakhi ranger station. Where the track reaches to top of the hill after 4km, walk to the West heading for an obvious saddle in the hills. Upon reaching the saddle, drop down the steep hill into the stream valley on the other side. This cave is the sink for the stream in the valley and is found by following the stream down for 1km.

General Description

The stream sinks into mud and rocks. To the left is an overflow channel leading to two cave entrances. The first entrance quickly pops out into a doline where the stream is met again on the other side of a low ridge. The stream quickly sinks again. At the end of the doline is a large overflow sink that can also be reached from the second entrance. Walking passage leads to a crawl and a 10m high skylight. The passage turns sharp right and drops down an awkward 4m climb. Another 4m climb follows after 30m and drops into a room. To the right passes an aven to reach a duck. Just beyond the stream enters from a low passage on the right and exits immediately down a tight hole on the left. Ahead a short muddy crawl opens into a larger boulder filled room, incompletely explored and draughting.

Technical Description

One 4m climb is awkward and requires bamboo

Dangers

Floods completely in wet weather

Outstanding Values

Fine example of immature, active passages with larger, semi-active overflows.

Site Code 33

Geology

Description

Fine example of immature, active lower passages and larger seasonal overflows. Largely phreatic in origin formed along small faults and strike of the bedding.

Rock Type

Rock Age

Limestone

Permian

Sediments ...

Mud deposited where water ponds, i.e. final chamber and dips in passages. Large breakdown in final room and entrance.

Speleothems

Very few; small common forms

Hydrology

Description

Perennial stream sink cave. Stream flows through immature passages with larger, flood overflows above. A lot of water sinks here in the rainy season. The rising is unknown, though Huai Wak resurgence (TK0023) is 10km to the West

River System

Stream Name

Catchment Area, km2

3

Flow, Cumec

Mae Khlong

0.1

Further Data date - April

Biology

Description

Not fully investigated. Stream based ecology with a few bats.

Identified Species.

A few bats - Rhinolophus luctus?; small snake

Food Supply Routes

Stream

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

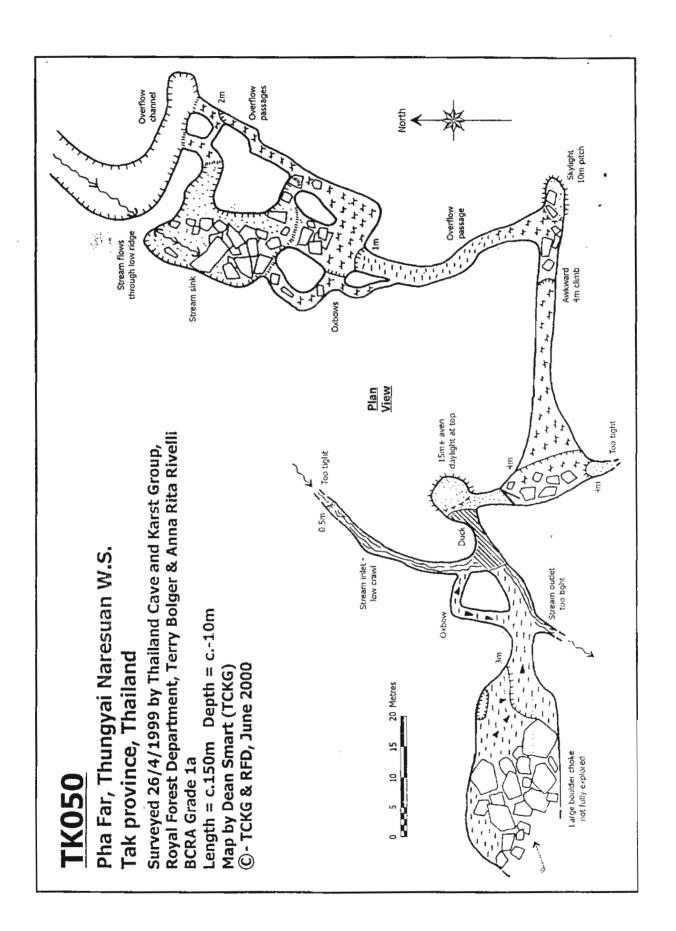
Manager

3.1

High

Royal Forest Department

Impacts



Site Code 34

English Names

Thai Names

TK051

TK051

Location

<i>Province</i>	<i>District</i>	Protects	Zone		
Tak	Umphang	WS Th	North		
<i>Mapsheet</i>	<i>UTM Zone</i>	Eastings	<i>Northings</i>	<i>Latitude</i>	Longitude 98.985076
4740 H	47P	498400	1723677	15.591790	
Elevation, m	Length, m	Depth,	m Survey l	File	
900	25	9	C:\Cave	Database\Maps	Tak\TK0051.tif

Access Description

Drive South along the track from Utakhi ranger station for c.5km. About 1km after the track has started descending the other side of the hill, walk to the West for 1km. Upon reaching the top of the ridge opposite drop down the steep hill into the stream valley on the other side. This cave is the sink for the stream in the valley and is found by following the stream down for 500m.

General Description

Entrance is a 4m climb down through boulders. The walking passage at the bottom descends to a sump.

Technical Description

None

Dangers

Raised CO2 levels at the end and floods completely in the rainy season

Outstanding Values

None

Geology

Description

Small overflow cave formed along fault and strike of bedding. Bedding dips 45 degrees to NE

Rock Type

Rock Age

Limestone

Permian

Sediments

Gravel and breakdown. Sand choke at end

Speleothems

Few, small common forms

Site Code 34

Hydrology

Description

Short cave acting as a flood sink and ending in a sump. Perennial stream sinks just up valley. Resurgence unknown, though Huai Wak resurgence (TK0023) is 10km to the West

River System

Stream Name

Catchment Area, km2

Flow, Cumec * 0.1

1. . .

1.5

Mae Khlong
Further Data

date - April

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

Manager

3.1

High

Royal Forest Department

Impacts
None

TK051 Pha Far, Thungyai Naresuan W.S. Tak province, Thailand Surveyed 27/04/1999 by Thailand Cave and Karst Group, Royal Forest Department, Terry Bolger & Anna Rita Rivelli Suunto compass/clino 30m fibron tape. BCRA grade 4c Length = 25m Depth = -8.6m Map by Dean Smart (TCKG). @ - TCKG & RFD, June 2000 Surface relation <u>plan</u> choked Magnetic Nodh Limestone Plan view 4m climb ough boulders TK051

Site Code 35

l.

English Names

Thai Names

TK052

TK052

Location

<i>Province</i> Tak	District Umphang	Protected Area WS Thungyai Naresuan East			Zone • North	
<i>Mapsheet</i> 4740 II	<i>UTM Zone</i> 47P	Eastings 498400	<i>Nort</i> : 1723	hings 677	<i>Latitude</i> 15.591790	Longitude 98.985076
Elevation, m 920	Length, m 50	Depth,	m	Survey C:\Cave		\Tak\TK0052.tif

Access Description

Drive South along the track from Utakhi ranger station for c.5km. About 1km after the track has started descending the other side of the hill, walk to the West for 1km. Upon reaching the top of the ridge opposite drop down the steep hill into the stream valley on the other side. This cave is found in the cliff above the sink for the stream in the valley. Follow the stream down for 500m to find the sink.

General Description

A 5m climb up the cliff reaches this obvious entrance. Inside the cave follows the cliff line to the left and right. Several other side entrances are revealed and connected by a terrace outside. A passage at the left hand end ascends to a round room with bats. To the right is an undescended 15m hole in the floor.

Technical Description

Ropes needed for the hole.

Dangers

None

Outstanding Values

A complete cord-marked pot was found in a low side chamber.

Geology

Description

Ancient phreatic cave with high aven and deep shafts in the floor. Bare limestone shelf runs along cliff at entrance level

Rock Type

Rock Age

Limestone

Permian

Sediments

sandy soil with guano covers floor

Speleothems

Some large, old flowstone

Site Code 35

Biology

Description

Surface fauna. Serow use the cave and bats (unidentified) roost in a small side chamber

Identified Species

Serow; bat

Food Supply Routes

Near surface; guano

Archaeology

Description

Large dry cave near a permanent stream contains a single, small cord-marked pot (12cm rim diameter) in a dark alcove. Pot is unbroken

Artifacts

cord-marked pottery

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

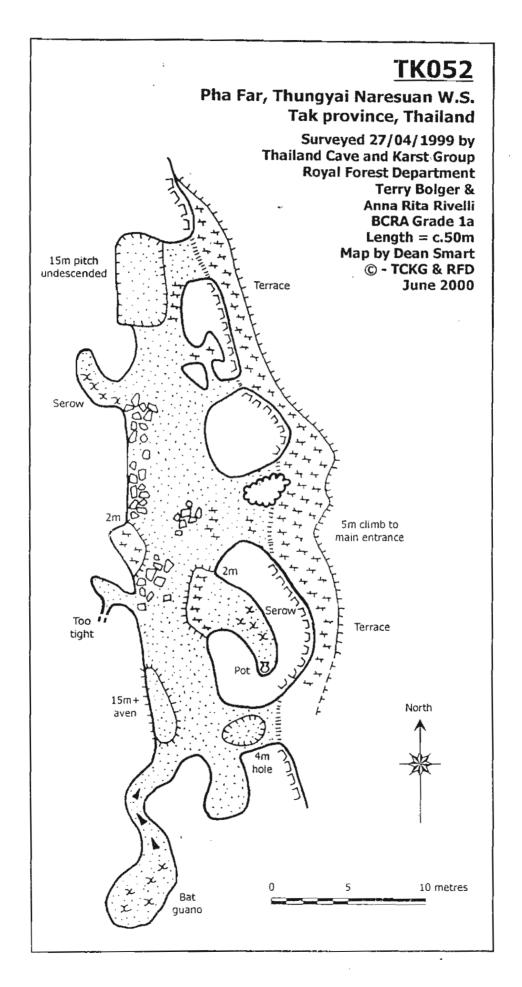
Manager

3.1

Low

Royal Forest Department

Impacts



Site Code 36

English Names

Thai Names

Tham Me Hark, TK061

ถ้ำแมะฮาก TK061

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protected Area WS Thungyai Naresuan East			Zone • North	
<i>Mapsheet</i> 4740 H	UTM Zone 47P	Eastings 497338	<i>North</i> : 17402	0	<i>Latitude</i> 15.741519	Longitude 98.975151
Elevation, m 990	Length, m	Depth,		Survey I		Tak\TK0061.tif

Access Description

2km along the track North of Ka Ngae Khi headquarters, there is an obvious limestone mountain on the left - Doi Rot Me. This cave is on the SW side of the mountain and difficult to get to due to undergrowth.

General Description

Very small cave, definitely not worth visiting. Small entrance leads to a small 'room' with another entrance to the right. A small passage loops back to 2m above the floor at the main entrance.

Technical Description

None

Dangers

Prickly & stinging plants, sharp limestone, death from exhaustion and disappointment

Outstanding Values

None

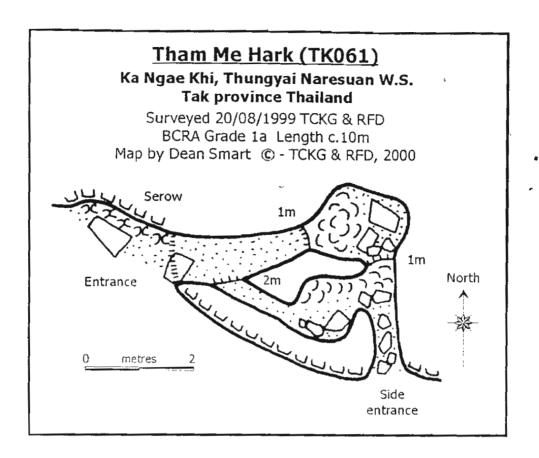
Management

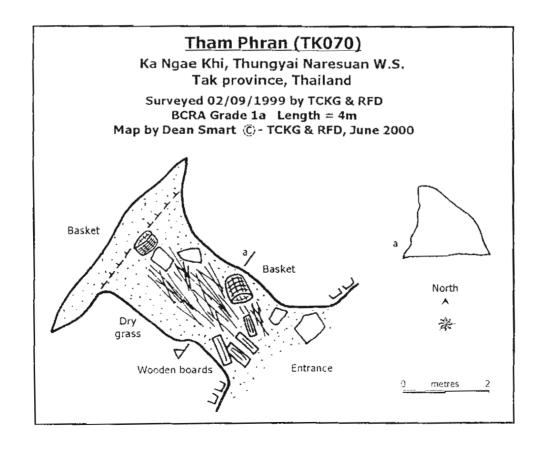
Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification E.	nergy Rating	Manager
3.1	Low	Royal Forest Department

Impacts





Site Code 38

English Names ...

Thai Names

Tham Phran, TK070

ถ้าพราน TK070

Location

<i>Province</i> Tak	District Umphang	Protected Area WS Thungyai Naresuan East			Zone North
Mapsheet 4740 H	<i>UTM Zone</i> 47P	Eastings 497550	<i>Northings</i> 1740450	<i>Latitude</i> 15.743430	Longitude * 98.977127
Elevation, m	Length, m 4	Depth, i		<i>pey File</i> ave Database\Maps	s\Tak\TK0070.tif

Access Description

2km along the track North of Ka Ngae Khi headquarters, there is an obvious limestone mountain on the left - Doi Rot Me. This cave is on the East side of the mountain and is an obvious entrance at the base of a cliff.

General Description

Tiny cave used by hunters as a shelter. The triangular entrance leads to a cross rift and no way on.

Technical Description

None

Dangers

None

Outstanding Values

None

Culture

Description

Small cave used by hunters for shelter.

Type of Use

Time of Use

Shelter

Recent, last 20 years

Artifacts

Bedding: Baskets

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification Energy Rating Manager
3.1 High Royal Forest Department

Impacts

Site Code 37

English Names

Thai Names

TK062

TK062

Location

<i>Province</i> Tak	<i>District</i> Umphang	<i>Protecto</i> WS Thu	<i>Zone</i> North	•		
Mapsheet 4740 H	<i>UTM Zone</i> 47P	Eastings 497162	<i>Northings</i> 1739945	<i>Latitude</i> 15.738869	<i>Longitude</i> 98.973510	•
Elevation, m 950	Length, m	Depth, 14		<i>File</i> Database\Maps	\Tak\TK0062.1	tif

Access Description

From Ka Ngae Khi headquarters, an obvious footpath heads West and then North through old fields. Walk along this path for 45 minutes to where it drops down off a low ridge. This stream sink is located on the other side of the fields, near to Doi Rot Me.

General Description

Seasonal stream sink can be entered by climbing down boulders to a low crawl. This opens quickly to walking passage that turns right and closes down after 30m. The stream outlet is too small. Straight ahead at the right hand bend, an upper level series is entered. Two large breakdown rooms lead to a crawl becoming too low after 25m. At the entrance to the first room, a low crawl to the right descends a series of short steps to meet the seasonal stream again. Tight crawling follows to where the stream exits down a tiny hole. Straight ahead is very tight crawl to a small chamber and boulder choke.

Technical Description

Some tight crawls.

Dangers

Slightly elevated CO2 in the lower stream passage. Some boulders may be loose and bears use the cave. Floods to the roof in wet weather

Outstanding Values

Very interesting fauna with many, pale invertebrates.

Geology

Description

Formed in thinly bedded (0.2-2m) dipping limestone with inclined breakdown rooms floored with slabs. Passages are guided partly by joints cutting through the bedding and the strike and dip (to NE) of the bedding

Rock Type Rock Age
Limestone Triassic

Sediments

Large breakdown slabs in upper chambers with mud on floor. Streamway is floored with small gravel with lining sand banks

Speleothems

Good curtains on sloping rooves of chambers; small popcom common: common forms

Site Code 37

Hydrology

Description

Seasonal stream sink draining old fields to south and west. Destination of water unknown

River System

Stream Name

Catchment Area, km2

Flow, Cumec

Mae Khlong

0.5

Further Data

date - August

Biology

Description

Very interesting and varied fauna based on stream input. May have several troglobitic species. Requires more study. Bears and porcupines use the cave.

Identified Species

Bat - Rhinolophus sp (c.10); Scutigera; Huntsman spider; cricket; cockroach; porcupine; bear; long-legged, brown opilione

Unusual Species

Small, white isopod - T; tiny, white mite(?) - T; rat - n.sp.

Food Supply Routes

Stream; guano

Environment

Description

Stream sink cave in semi-forested/semi-grassland area. Seasonal stream sink with one entrance, no draught and high humidity

22

95

Air Temp C Humidity % Water Temp C

Water pH

CO2 High % O2 Low % 1.2

Further Data

date - August

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

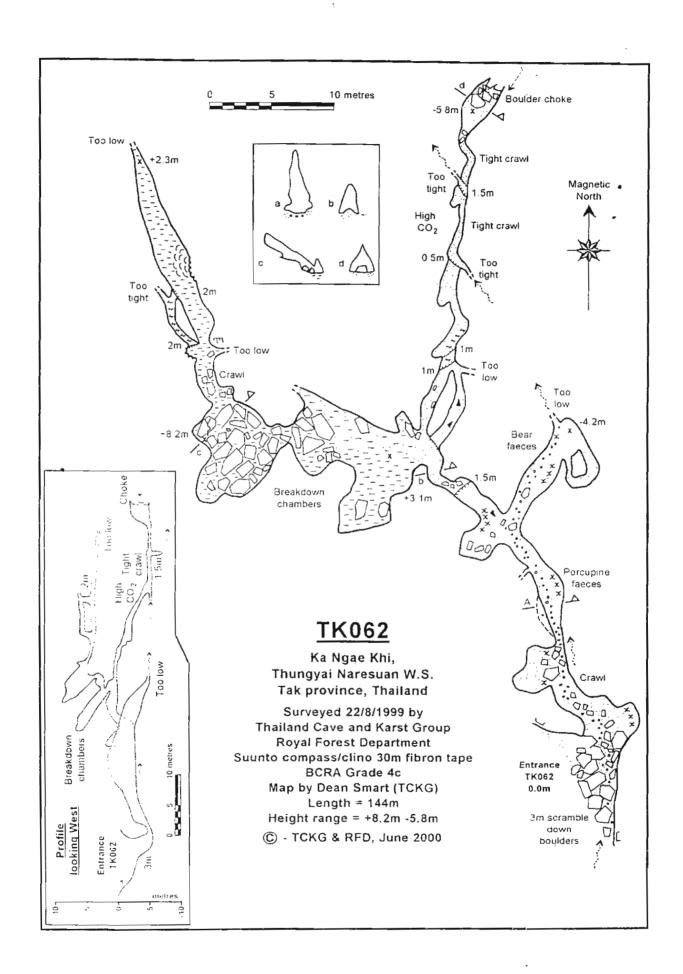
Manager

3.1

High

Royal Forest Department

Impacts



Site Code 39

English Names

Thai Names

TK071

TK071

Location

Province Tak	<i>District</i> Umphang	Protect WS Th	Zone North			
Mapsheet 4740 II	UTM Zone 47P	Eastings 496860	<i>Northings</i> 1738987	<i>Latitude</i> 15.730210	<i>Longitude</i> • 98.970687	
Elevation, m 1030	Length, m 12	Depth,		Survey File C:\Cave Database\Maps\Tak\TK0071.tif		

Access Description

Walk on the footpath heading West and then North from Ka Ngae Khi headquarters. After passing TK062, head across the fields to the base of the large ridge opposite. Walk SouthEast along the base until climbing up into a large hidden doline after 1km. This cave is found in the rocky area on top of the saddle at the far side of the large doline.

General Description

Tiny cave with a single passage ending at a small skylight.

Technical Description

None

Dangers

None

Outstanding Values

None

Geology

Description

Typical small boneyard cave, formed phreatically in the sub-soil zone. Many others in area.

Rock Type

Rock Age

Limestone

Permian

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

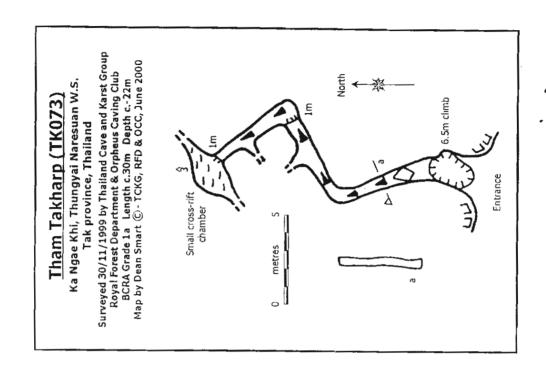
Classification 3.1

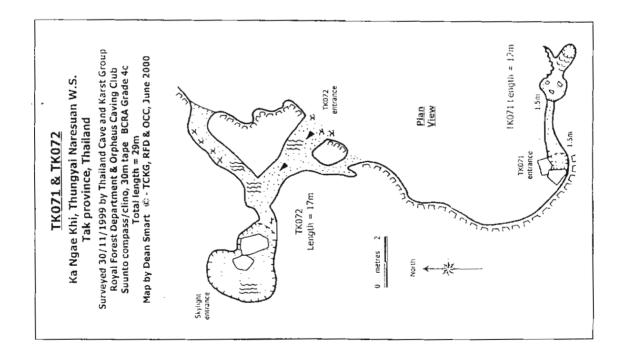
Energy Rating
High

Manager

Royal Forest Department

Impacts





Site Code 40

English Names

Thai Names

TK072

TK072

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protect WS Th	Zone North				
<i>Mapsheet</i> 4740 II	<i>UTM Zone</i> 47P	<i>Eastings</i> 496860		things 8987	<i>Latitude</i> 15.730210	Longitude* 98.970687	
Elevation, m	Length, m	Depth, m		Survey A		\Tak\TK0071_tif	

Access Description

Walk on the footpath heading West and then North from Ka Ngae Khi headquarters. After passing TK062, head across the fields to the base of the large ridge opposite. Walk SouthEast along the base until climbing up into a large hidden doline after 1km. This cave is found in the rocky area on top of the saddle at the far side of the large doline.

General Description

Small cave with two entrances joining just inside and leading to a large skylight.

Technical Description

None

Dangers

None

Outstanding Values

None

Geology

Description

Typical small boneyard cave, formed phreatically in the sub-soil zone. Many others in area.

Rock Type Rock Age
Limestone Permian

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification Energy Rating Manager
3.1 High Royal Forest Department

Impacts

Site Code 41

English Names

Thai Names

Tham Takharp, TK073

ຄຳຕະທານ TK073

Location

<i>Province</i> Tak	District Umphang	Protected Area WS Thungyai Naresuan East			Zone • North	
<i>Mapsheet</i> 4740 II	<i>UTM Zone</i> 47P	Eastings 496860	<i>Nortl</i> 17389	0	<i>Latitude</i> 15.730210	Longitude 98.970687
Elevation, m	Length, m 30	Depth, 22		Survey . C:\Cave		\Tak\TK0073.tif

Access Description

Walk on the footpath heading West and then North from Ka Ngae Khi headquarters. After passing TK062, head across the fields to the base of the large ridge opposite. Walk SouthEast along the base until climbing up into a large hidden doline after 1km. This cave is found just below the top of the rocky saddle at the far side of the large doline.

General Description

A narrow rift at the bottom of the 6.5m entrance climb bends right and then left before dropping into a small cross-rift room. No way on.

Technical Description

Entrance climb is slightly awkward.

Dangers

None

Outstanding Values

None

Geology

Description

Typical small boneyard cave, formed phreatically in the sub-soil zone. Many others in area.

Rock Type

Rock Age

Limestone

Permian

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

Manager

3.1

Royal Forest Department Low

Impacts

Site Code 42

English Names

Thai Names

TK074

TK074

Location

Tak	Umphang	WS Thungyai Naresuan East			North
<i>Mapsheet</i> 4740 II	<i>UTM Zone</i> 47P	Eastings?	Northings ?	Latitude	Longitude
Elevation, m	Length, m	Depth,	•		s\Tak\TK0074.tif

Access Description

Located in the prominent limestone ridge 2km West of the headquarters. Hard to find and no co-ordinates available.

General Description

Small cave with two entrances. Climbing down two 1.5m steps enters a small room with an 8m deep hole to an overtight passage.

Technical Description

The 8m climb can be descended without equipment

Dangers

None

Outstanding Values

None

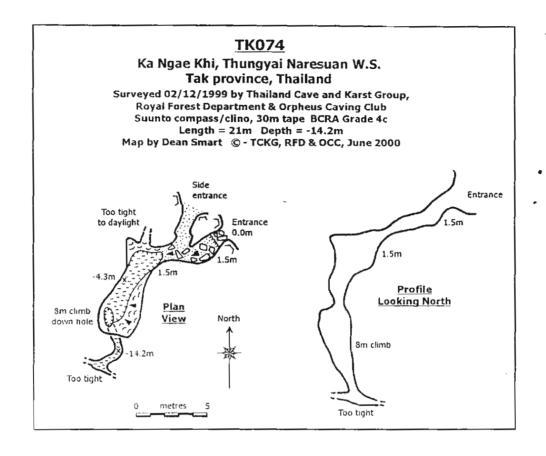
None

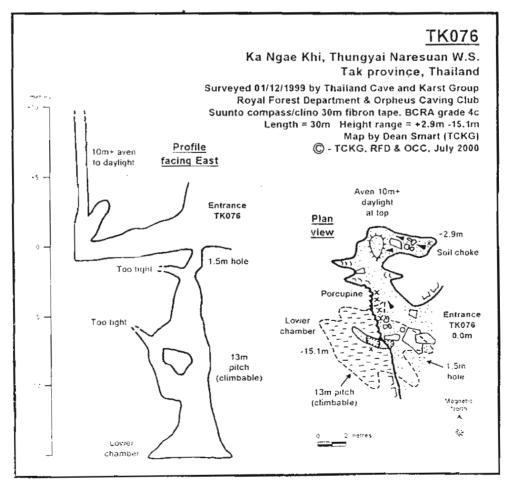
Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification	Energy Rating	Manager
3.1	High	Royal Forest Department
Impacts		





Site Code 46

English Names

Thai Names

TK076

TK076

Location

<i>Province</i> Tak	Umphang		<i>ed Area</i> ungyai Nare	esuan East	Zone . North
Mapsheet 4740 H	UTM Zone 47P	Eastings 497016	<i>Northings</i> 1739323	<i>Latitude</i> 15.733240	<i>Longitude</i> 98.972152
Elevation, m 990	Length, m 30	<i>Depth</i> , 18		vey File Cave Database\Maps	\Tak\TK0076.tif

Access Description

Walk on the footpath heading West and then North from Ka Ngae Khi headquarters. After passing TK062, head across the fields to the base of the large ridge opposite. Walk SouthEast along the base until this obvious entrance is reached after 500m at the base of a cliff.

General Description

The large entrance leads in, turns right and finishes at a soil choke. A 10m high aven has daylight at the top. At the entrance, a small hole to one side opens into a free-climbable 13m pitch. The chamber at the bottom is choked with mud. Formed in Permian limestone.

Technical Description

13m climb requires care

Dangers

None

Outstanding Values

None

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification Energy Rating Manager
3.1 High Royal Forest Department

Impacts

Site Code 43

English Names

Thai Names

TK077

TK077

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protected Area WS Thungyai Naresuan East			Zone North •
<i>Mapsheet</i> 4740 H	<i>UTM Zone</i> 47P	Eastings?	Northings ?	Latitude	Longitude,
Elevation, m	Length, m	Depth,			s\Tak\TK0077 tif

Access Description

In the limestone ridge 2km West of the HQ. Hard to find and no co-ordinates available.

General Description

Tiny cave climbing up to a flowstone choke.

Technical Description	Dangers	Outstanding Values
None	None	None

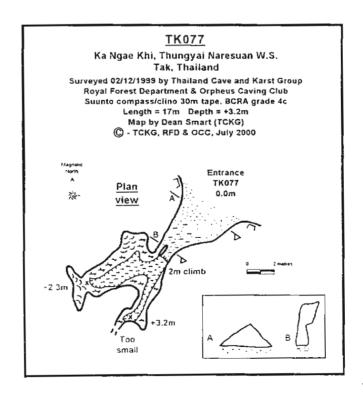
Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification	Energy Rating	Manager
3.1	High	Royal Forest Department
f		

*Impacts*None



Site Code 44

English Names

Thai Names

Yu Nai Sinks, TK204

ที่น้ำมุดยูไน TK204

Location

<i>Province</i> Tak	District Umphang	Protected Area WS Thungyai Naresuan East		<i>Zone</i> North	
Mapsheet 4740 H	UTM Zone 47P	Eastings 492500	Northings 1735700	Latitude	Longitude•
Elevation, m	Length, m	Depth,	m Survey n/a	File	

Access Description

Walk downvalley from Yu Nai ranger station for 1 hour to TK005. From here head NW for 1km to an obvious valley where the sinks are located.

General Description

A series of 7 spectacular, seasonal stream sinks in dolines 20m deep formed in a valley floor at the contact of Permian limestone and sedimentary rocks. Most are choked at surface, one has a small cave that is choked after 30m. Not labelled.

Technical Description

None

Dangers

The dolines would flood rapidly in heavy rain.

Outstanding Values

None

Hydrology

Description

Series of 7 seasonal, choked stream sinks in a valley NW of TK005. Their resurgence(s) are unknown. Catchment area is for all 7 sinks combined and comprises the non-carbonate hills to east.

River System Stream Name Catchment Area, km2 Flow, Cumec Mae Khlong 1 0

Further Data date - December

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification Energy Rating Manager
3.1 High Royal Forest Department

Impacts

Site Code 45

English Names

Thai Names

Huai Bi Sink, TK200

ที่น้ำมุดห้วยปี TK200

Location

Province Tak	District Umphang	WS Thungyai Naresuan East		Zone North	
<i>Mapsheet</i> 4740 II	<i>UTM Zone</i> 47P	Eastings 490989	<i>Northings</i> 1721129	Latitude	Longitude•
Elevation, m 940	Length, m	Depth,	m Survey n/a	File	

Access Description

Walk down the Huai Bi valley from Thung Nar Noi ranger station for nearly 1 day. The footpath passes right past a series of large dolines in tufa and mud where the stream sinks.

General Description

Series of small to medium dolines in soil and tufa. The Huai Bi sinks here to rise again 1km further downvalley. Not labelled.

Technical Description

None

Dangers

Whole valley floor may become flooded very quickly.

Outstanding Values

Example of underground stream flowing through Quaternary tufa

Geology

Description

Valley is floored with extensive tufa. Stream sinks into this in dry season and flows underground for c.1km.

Rock Type

Rock Age

Tufa

Quaternary

Speleothems

Most of the valley floor is made of tufa deposits

Hydrology

Description

During the dry season, the Huai Bi sinks into the valley floor and resurges again c.1km to the N. Floods overpower the sink and flow on the surface

River System

Stream Name

Catchment Area, km2

Flow, Cumec

Mae Khlong

Huai Bi (Huai Lathaboeng)

175

0.25

Further Data

date - November

Site Code 45

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification 3.1

Energy Rating
High

Manager

Royal Forest Department

Impacts

Site Code 47

English Names

Thai Names

TK078

TK078

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protecte WS Thu	e d Area Ingyai Naresua	n East	<i>Zone</i> North
<i>Mapsheet</i> 4740 II	UTM Zone 47P	Eastings 496900	Northings 1738800	<i>Latitude</i> 15.728509	<i>Longitude</i> 98.971061
Elevation, m	Length, m	Depth, 1	•		\Tak\TK0078 tif

Access Description

Walk on the footpath heading West and then North from Ka Ngae Khi headquarters. After passing TK062, head across the fields to the base of the large ridge opposite. Walk SouthEast along the base until climbing up into a large hidden doline after 1km. This cave is found in the bottom of the doline. The entrance is in the base of a cliff above a bouldery area.

General Description

Big entrance behind boulders leads down a flowstone slope to a chamber and rift to the lower stream passage. A crawl to either left or right meet at another chamber with a steeply sloping flowstone floor. The rift descend steepply to a 2m climb and the stream. The inlt is too tight. The outlet starts as walking size, but soon requires a scramble up boulders. A climb down the other side regains the stream and some tight squeezes, eventually becoming too tight.

Technical Description

None

Dangers

None

Outstanding Values

Very large speleothems with some straws and helictites

Geology

Description

Massive speleothems mask the geology in the entrance chamber. Lower stream level is formed by gaps between massive boulders at the base of the entrance cliffline

Rock Type Rock Age
Limestone Permian

Sediments

Muddy in lower streamway with sandy soil and large breakdown in the entrance chamber

Speleothems

Massive columns and flowstone. Reasonable helictites and straws in entrance chamber and curtains on sloping roof

Site Code 47

Hydrology

Description

Very small stream flows through lower part of the cave. Origin and destination unknown though water is heard in boulders 50m NW of cave.

River System

Stream Name

Catchment Area, km2

Flow, Cumec

0

Mae Khlong

Further Data date - December

Biology

Description

Varied invertebrate fauna, all surface forms. A few bats and porcupines. No aquatic fauna was noted. Near surface ecosystem.

Identified Species

Opilione - 3+ sp; cricket; Scutigera; Huntsman spider; Glyphylus; pond skaters; bat - Rhinolophus sp; porcupine; gecko

Food Supply Routes

Near surface; guano; stream; roots

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

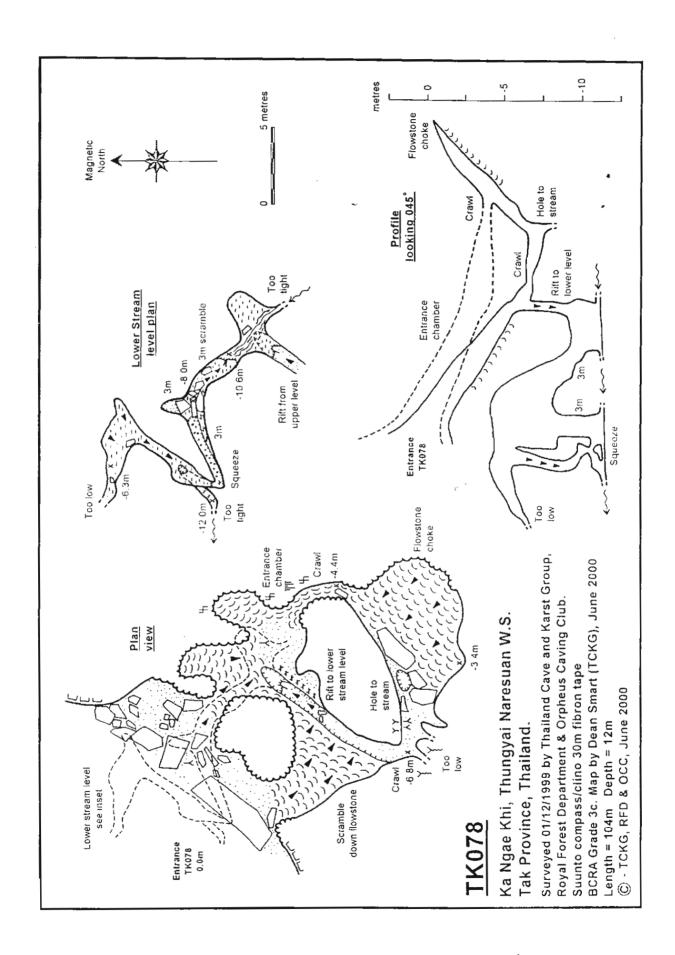
Manager

3.1

High

Royal Forest Department

Impacts



Site Code 48

English Names

Thai Names

TK079

TK079

Location

<i>Province</i> Tak	<i>District</i> Umphang		<i>ed Area</i> ungyai Naresua	ın East	Zone North
Mapsheet 4740 II	<i>UTM Zone</i> 47P	Eastings 491485	<i>Northings</i> 1733600	<i>Latitude</i> 15.681489	<i>Longitude</i> - 98.920539
Elevation, m 920	Length, m	<i>Depth</i> ,	•		\Tak\TK0079.tif

Access Description

2 hours walk from Yu Nai ranger station. Follow the good footpath down the valley past the sink of TK005. The path climbs up a ridge and drops down the other side. Cross through grass fields and follow the obvious stream gulley down to a small lake. The 3 entrances to this cave are found 100m-150m beyond the huge entrance of TK082.

General Description

The 'main' entrance leads to a 2m climb down into swamp water and low airspace. The swamp entrance reaches low airspace almost immediately. The Elephant entrance is a large chamber with some smaller passages off at the back. To the left is a walking passage descending to a pool. A climb up and over flowstone reaches two small entrances and swamp water with low airspace. A voice connection links the low airspaces in each cave.

Technical Description

None

Dangers

None

Outstanding Values

Possible habitation site owing to location and large chamber. Interesting sediments. Elephants use the cave.

Geology

Description

3 small interconnected caves of ancient phreatic origin modified through notching by marsh water. Interesting sediments

Rock Type Rock Age
Limestone Triassic

Sediments

Floor is covered by mud deposited by rising marsh water. Stuck to the walls at back of main chamber are poorly sorted, rounded to sub-rounded cobbles (20cm diameter) to small gravel in red clay matrix. No fabric. Provenance unknown, maybe 3km to NE

Speleothems

Few common forms; large flowstones

Site Code 48

Palaeontology

Description

A few animal remains - small antler, teeth of small cat and bamboo rat. Most likely modern

Species Found

Small deer; small cat; bamboo rat

Archaeology

Description

Ideal habitation site near permanent water. One small pottery sherd found. Animal remains are probably natural. Seasonal flooding may have buried most artifacts under mud.

Artifacts

cord-marked pottery; animal remains

Environment

Description

Series of 3 small caves partly filled with marsh water (low pH). High humidity due to proximity of marsh

Further Data

date - December

Management

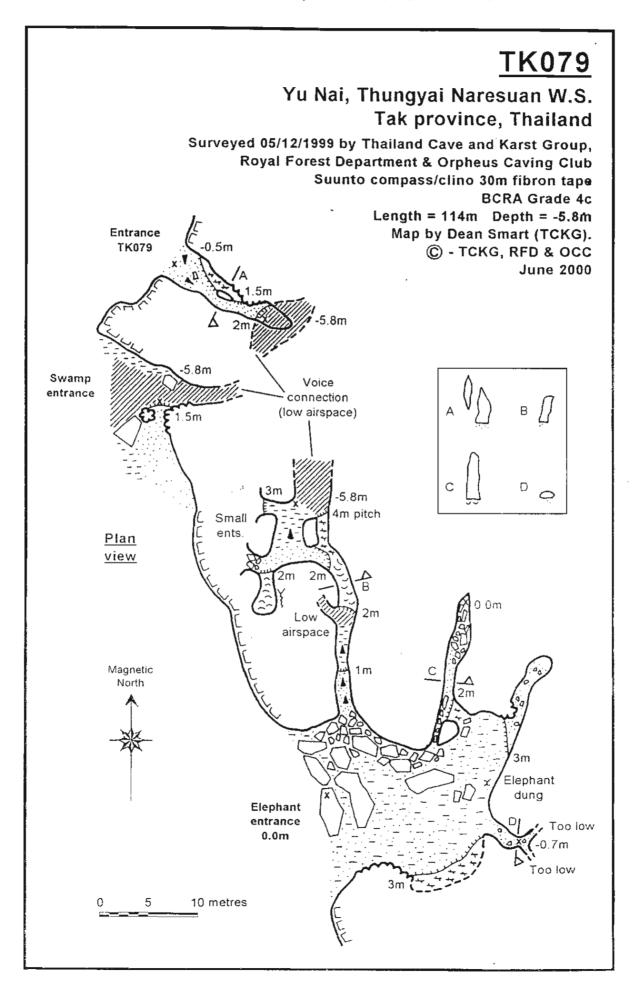
Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification En	iergy Rating	Manager
3.1	High	Royal Forest Department

Impacts

1 :



Site Code 49

English Names

Thai Names

TK203

TK203

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protects WS The	<i>Zone</i> North		
Mapsheet 4839 IV	UTM Zone 47P	Eastings 504716	<i>Northings</i> 1702900	Latitude	Longitude .
Elevation, m 1070	Length, m	Depth,	m Survey	File	

Access Description

Best found by walking to TK049 sink, going through that cave and onto the sinks 500m beyond. To reach TK049, walk on good footpath for 30 minutes to SW from Huai Nam Khieo ranger station. Upon reaching TK012, turn right and walk North for a further 30 minutes. Follow the obvious stream gulley down to the TK049 entrance. Go through the cave, emerge at the resurgence (TK028) and follow the stream gulley to the sink.

General Description

Seasonal stream sink in a series of dolines formed at a low point in a very broad doline floored with Permian limestone. All dolines are choked. Not labelled.

Technical Description

A ladder is needed to descend some of the dolines.

Dangers

Floods rapidly in very wet weather.

Outstanding Values

None

Hydrology

Description

Downstream of TK049, the seasonal stream flowing through that cave sinks into a series of choked dolines. The rising is unknown

River System	Stream Name	Catchment Area, km2	Flow, Cumec
Mae Khlong		5	0

Further Data date - April

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification 3.1	Energy Rating High	Manager Royal Forest Department
Impacts		

171

Site Code 50

English Names

Thai Names

TK201

1 :

TK201

Location

<i>Province</i> Tak	<i>District</i> Umphang	WS Thungyai Naresuan East				North
<i>Mapsheet</i> 4839 IV	<i>UTM Zone</i> 47P	Eastings 505906	<i>Northings</i> 1701540		Latitude	Longitude .
Elevation, m	Length, m	Depth,		Survey File		

Access Description

Best approached via TK012 and TK043. Walk on good footpath for 30 minutes to SW from Huai Nam Khieo ranger station. Find and enter the TK012 entrance located on NW side of the obvious tower after crossing a stream. Walk through that cave and exit via the TK013 entrance on the West side of the hill. Walk a further 30 minutes to the South around the large tower to TK043. Continue beyond for about 500m, find a small stream and follow it down to the sink area.

General Description

The lowest point (marked 1055m) in the very broad Huai Nam Khieo doline is a large. flat boggy area where a perennial stream sinks into the Permian limestone floor. Not labelled.

Technical Description

Dangers

None

None

Outstanding Values

None

Hydrology

Description

The lowest point in the Huai Nam Khieo doline takes a small stream flowing from the hill containing TK012. It sinks into a flat, boggy area. Rising unknown

River System

Stream Name

Catchment Area, km2

3

Flow, Cumec

Mae Khlong

0.1

Further Data

date - February

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

Manager

3.1

High

Royal Forest Department

Impacts

Site Code 51

Latitude

Longitude -

English Names

Thai Names

TK202

TK202

Location

ProvinceDistrictProtected AreaZoneTakUmphangWS Thungyai Naresuan EastNorth

Mapsheet UTM Zone Eastings Northings 4740 II 47P 499750 1720800

Elevation, m Length, m Depth, m Survey File 930 0 0 n/a

Access Description

Stop at the 2nd bridge along the track after Utakhi ranger station (a distance of c.7km). Walk Westwards towards the huge limestone cliff (Pha Fa). After 1km of elephant paths through grassland and old fields, a perennial stream is met. Follow this downstream to the sink.

General Description

A perennial stream sink that is choked. Just beyond, the stream is seen again in the floor of another doline, but cannot be followed. There are other dolines in the valley to the South - all choked. Two other seasonal stream sinks, one to the North, the other to the East are both choked. Formed at the contact of shale/sandstone and Permian limestone. Not labelled.

Technical Description Dangers
None None

Outstanding Values

None

Hydrology

Description

Series of 3 stream sinks at Pha Fa. One is perennial, two are seasonal. The resurgence(s) are unknown. Catchment area size is for all 3 sinks combined.

River System Stream Name Catchment Area, km2 Flow, Cumec Mae Khlong 7 0.1

Further Data date - April

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification Energy Rating Manager
3.1 High Royal Forest Department

*Impacts*None

Site Code 52

English Names

Thai Names

TK081

1 :

TK081

Location

Province Tak	District Umphang	WS Th	Zone . North		
<i>Mapsheet</i> 4740 H	UTM Zone 47P	<i>Eastings</i> 491889	Northings 1733324	<i>Latitude</i> 15.678990	<i>Longitude</i> 98.924308
Elevation, m	Length, m	Depth,	•		
940	26	12	C:\Cav	e Database\Maps	\Tak\TK0081.tif

Access Description

2 hours walk from Yu Nai ranger station. Follow the good footpath down the valley past the sink of TK005. The path climbs up a ridge and drops down the other side. Just after passing through an area of large pinnacles, climb up the ridge to the left and walk down into the small valley running parallel to the large valley with the footpath. This obvious rift entrance is in the floor of the valley.

General Description

Basically a single, straight rift passage descending to end in a sediment choke at the bottom. Too tight to follow at roof level.

Technical Description

None

Dangers

None

Outstanding Values

None

Geology

Description

Narrow, high rift guided by a fault. Bedding dips 10 degrees to east

Rock Type

Rock Age

Limestone

Triassic

Sediments

Inwashed soil at entrance with choke of reddish clay at bottom

Management

Description

Remote. within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

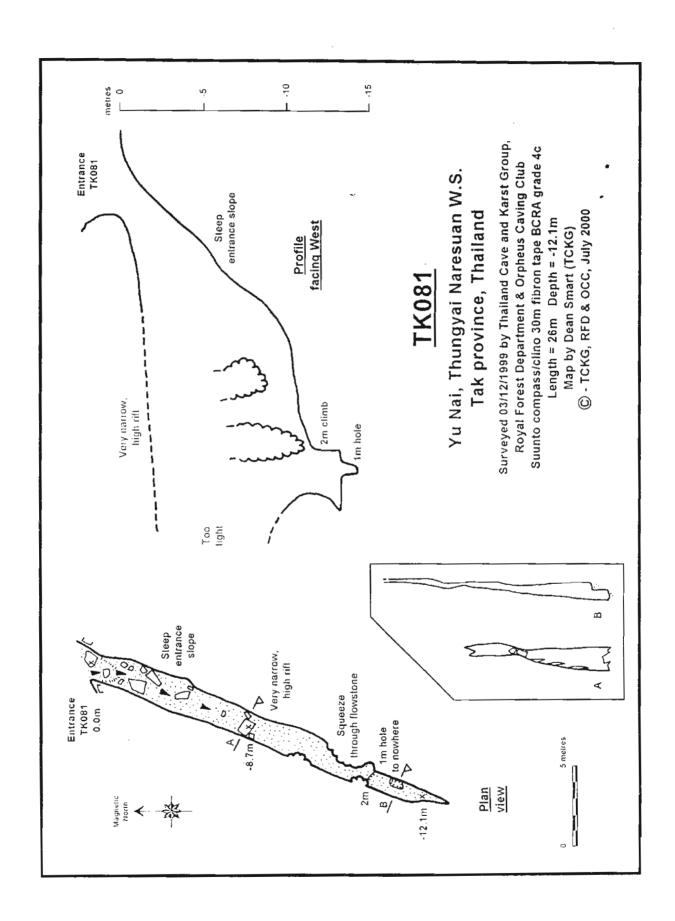
Manager

3.1

Low

Royal Forest Department

Impacts



Site Code 53

English Names

Thai Names

TK082

TK082

Location

<i>Province</i> Tak	<i>District</i> Umphang	Protected Area WS Thungyai Naresuan East			Zone • North
<i>Mapsheet</i> 4740 H	<i>UTM Zone</i> 47P	Eastings 491484	<i>Northings</i> 1733498	<i>Latitude</i> 15.680569	Longitude 98.920532
Elevation, m 920	Length, m 163	Depth,	•		\Tak\TK0082.tif

Access Description

2 hours walk from Yu Nai ranger station. Follow the good footpath down the valley past the sink of TK005. The path climbs up a ridge and drops down the other side. Eventually a stream gulley is reached with grass fields. Follow the stream gulley down to a small lake and this massive entrance.

General Description

Very large entrance reduces in height to a meandering walking sized passage. An oxbow is passed at roof level on the right and a keyhole passage leads to a shard left hand bend. Walking continues for another 20m and the roof lowers. Hands and knees crawling over mud gets progressively lower until it becomes impossible to go further.

Technical Description

None

Dangers

Floods quickly in wet weather

Outstanding Values

Nice passage geomorphology

Geology

Description

Complex history. Originally phreatic with a vadose phase creating keyholes. Much sediment and a half-tube suggests some paragenesis. Marsh water has enlarged the entrance through notching. 2 intersecting faults guide the cave, SE then NE.

Rock Type
Limestone

Rock Age

Limestone

Triassic

Sediments

Gravel floored stream channel with low sandy bank becomes increasingly muddy into the cave. End in mud choke. Sand in upper levels

Speleothems

Few, small common forms

Eurther Data

Bedding dips 10 degrees to east. Good vadose morphologies in cave

Site Code 53

Hydrology

Description

Large seasonal stream sink, resurgence unknown

River System Stream Name

Catchment Area, km2

1

Flow, Cumec

Mae Khlong

Further Data date - December

Biology

Description

A few bats provide guano, though ecology is mostly stream based.

Identified Species

bat - Megaderma lyra (c.15); cricket; Opilione

Food Supply Routes

Stream; guano

Environment

Description

Seasonal stream sink located near to a marshy area with subsequently high humidity

Air Temp C Humidity % Water Temp C Water pH CO2 High % O2 Low % 20 95

Further Data

date - December

Management

Description

Remote, within a wildlife sanctuary and protected. Very unlikely to be developed.

Classification

Energy Rating

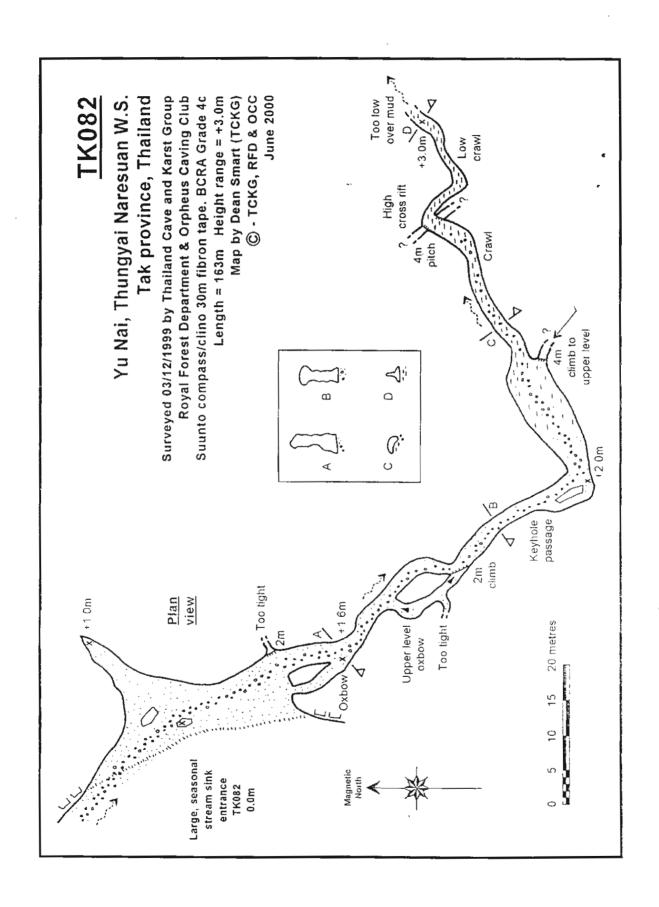
Manager

3.1

High

Royal Forest Department

Impacts



Mary Mary

Site Code 176

Latitude

Longitude.

English Names

Thai Names

'Hohlen'

'โหเล็น'

Location

ProvinceDistrictProtected AreaZoneTakUmphangWS Thungyai Naresuan EastNorth

Mapsheet UTM Zone Eastings Northings 4740 II 47P 492746 1734259

Elevation, m Length, m Depth, m Survey File 960 15 15 n/a

Access Description

Next to the path from Yu Nai to Nong Ma Ngu lake, c.2 hrs walk from the station.

General Description

Undescended 15m deep shaft, 3m in diameter

Technical Description

Ropes or ladders required to descend. Belay to trees or boulders

Dangers

Vertical aspect requires care

Thailand Caves Database

Site Code 177

English Names

Thai Names

Nong Ma Ngu Sink

ที่น้ำมุดหนองมางู

Location

Protected Area Zone Province District North WS Thungyai Naresuan East Tak Umphang Mapsheet UTM Zone Eastings Northings Latitude Longitude 4740 H 47P 491901 1733302 Elevation, m Length, m Depth, m Survey File 10 0 n/a 910

Access Description

On the east side of Nong Ma Ngu marsh at the base of a small cliff. 3 hours walk to the west of Yu Nai ranger station

General Description

Small stream sink taking a trickle of water from the marsh. Sumps after 10m. Rising unknown and not surveyed.

Technical Description

None

Dangers

Floods completely in wet weather

Site Code 178

English Names

Thai Names

Overflow Sink - Yu Nai

ที่น้ำมุดแห้งยู่ใน

Location

Tak	<i>District</i> Umphang	WS Th	Zone North		
<i>Mapsheet</i> 4740 H	<i>UTM Zone</i> 47P	Eastings 493576	<i>Northings</i> 1734527	Latitude	Longitude*
Elevation, m	Length, m	Depth,	•	File	
910	0	0	n/a	•	

Access Description

Walk 1 hour west of Yu Nai ranger station to the perennial sink of TK005. Continue along seasonal overflow channel above for 500m and this overflow sink is at the base of a small cliff where the channel ends

General Description

Flood overflow sink for Tham Nam Mut Yu Nai. Completely choked with bamboo and logs. No draught. There may be other overflow sinks in the area. The rising is unknown

Technical Description

None

Dangers

Floods severely

Outstanding Values