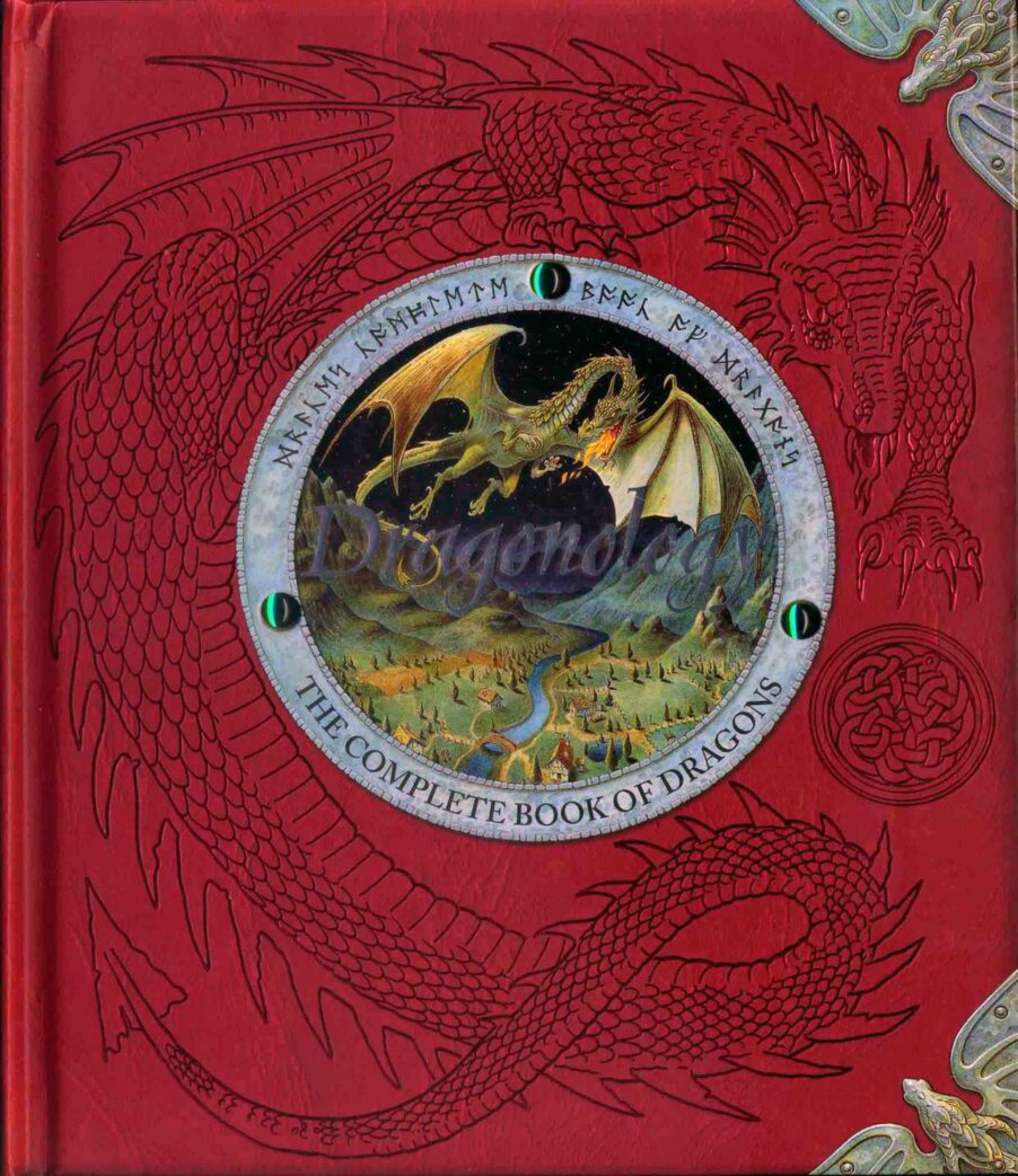

Dragonology
THE COMPLETE BOOK OF DRAGONS

Spell to Catch a Dragon

Take a mirror and sprinkle it with dragondust. Then place a sapphire or other treasure outside the dragon's lair. When the dragon emerges to investigate the gemstone, quickly bring out the mirror so that the dragon sees its own reflection, and cry, "Ecce Narcisso Draconus Attractivae!" This spell will tame the dragon – but watch out when it wears off!
(for a small sample of dragondust, see appendix 2)



The farthest west I found the Dornoch Wyrm – the ruins of Eilean Donan, Scotland, 1903.



To Whom It May Concern —

I must send copies to following contributors!

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Douglas Carrel, Chief Draughtsman

Wayne Anderson, Pictorial Artist

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Nghiem Ta, Artistic Direction

Also– A. J. Wood, Benefactor & Friend

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Manufactured in China.

Publisher's note: This book purports to be the facsimile of an original published on a print run of 100 copies in 1896, of which a copy was recently found in a bookshop near the Seven Dials in London. Unfortunately, the publisher has been unable to ascertain whether a real Dr. Ernest Drake ever lived in St. Leonard's Forest or wrote a book called Dragonology and so, with regret, is unable to make any claim as to the truth of this and must present this volume merely as an interesting curiosity.

www.dragonology.com



M. Martin's dragon decoy dummy: Remember flame-retardant paint!!

templar publishing



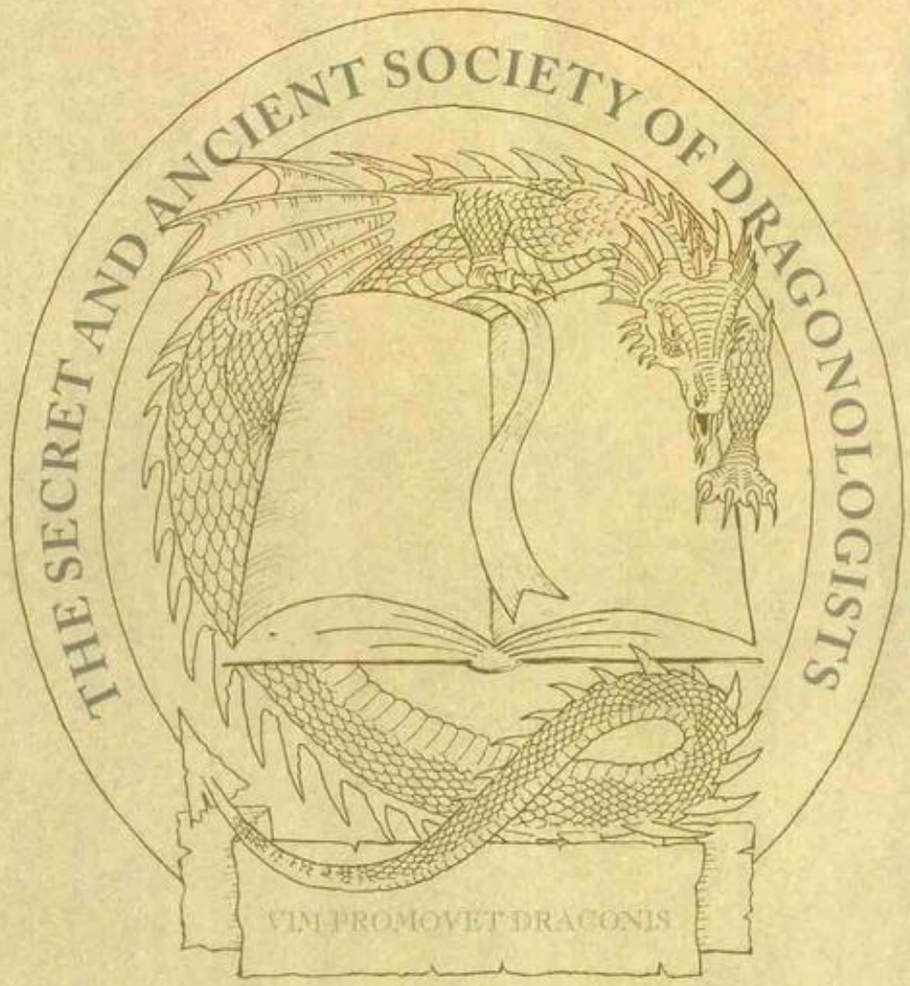
DR. ERNEST DRAKE'S

DRAGONOLOGY.

THE COMPLETE BOOK OF DRAGONS.

EDITED BY

DUGALD A. STEER, B.A. (BRIST), S.A.S.D.



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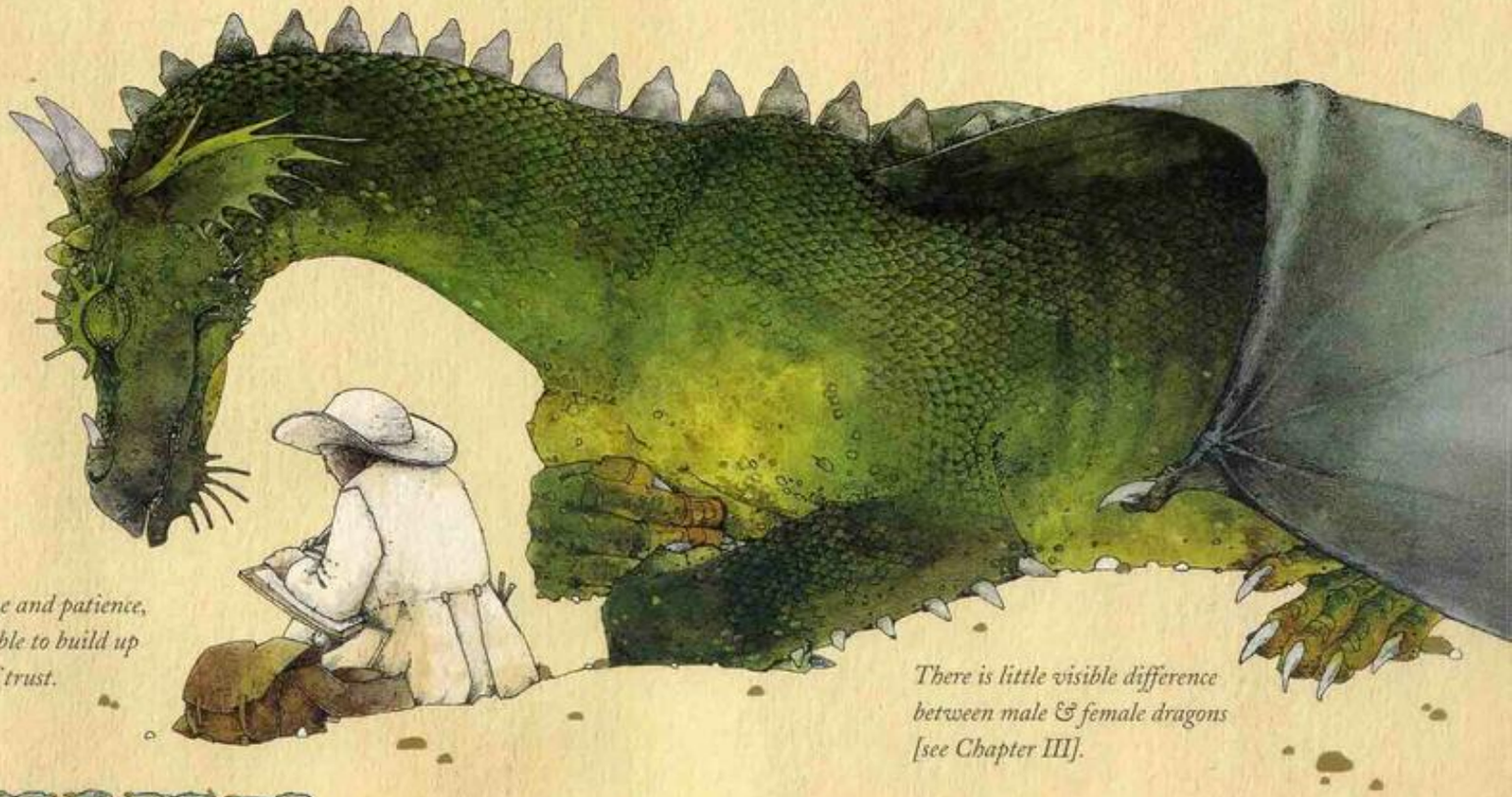
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CHAPTER I.

FOREWORD.
AN INTRODUCTION TO DRAGONOLOGY.

Of all the natural sciences, dragonology is perhaps the most rewarding, being at the same time one of the oldest and the least researched. Dragons have been studied since mankind's earliest days and yet, paradoxically, they are one of the least known of the Earth's creatures. So, while many scientists believe that the vast majority of the world's flora and fauna are now understood, in the little-known field of dragonology the way lies open for exciting new discoveries.



With time and patience, it is possible to build up a bond of trust.

There is little visible difference between male & female dragons [see Chapter III].

CONTENTS.

Introduction i
Dragons of the World ii
Western Dragons iii
Eastern Dragons iv
Other Dragons v
Dragon Biology & Physiology vi
Life Cycle of Dragons vii
Dragon Behaviour viii
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Appendix II: Spells & Charms xii
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REFUTING THE SCEPTICS.

As dragonologists, we must be prepared to refute those who claim that dragons are unreal. Consider how many creatures there may be that are still unknown to accepted science. When our scientists first heard of the duck-billed platypus in 1797 they laughed. How could an egg-laying mammal with a duck's beak and webbed feet exist? Even when shown physical evidence they cried 'fraud'! Yet by 1884 even the most sceptical had changed their opinion. Recently, Henry Stanley learned of another apparently mythical animal, the okapi, while searching for Dr. Livingston. With a giraffe's horns and a zebra's legs it has so intrigued scientists they are determined to find one. Yet there is not one who is willing to mount an expedition to bring dragons the scientific attention they deserve!



The remarkable okapi—a mythical beast or new scientific wonder of the African Congo?



A duck-billed platypus—some believed that the original specimen was a stitched-together fake.

DRAGONS IN SCIENCE.

All scientific dragonologists must draw the conclusion, having read the work of Charles Darwin in his *Origin of Species* of 1859, that dragons, like all creatures, have evolved so as to best exploit the habitats in which they live. Noble in form and majestic in flight, one wonders if mankind, through effort or science, may one day be able to imitate some of the dragon's natural abilities.

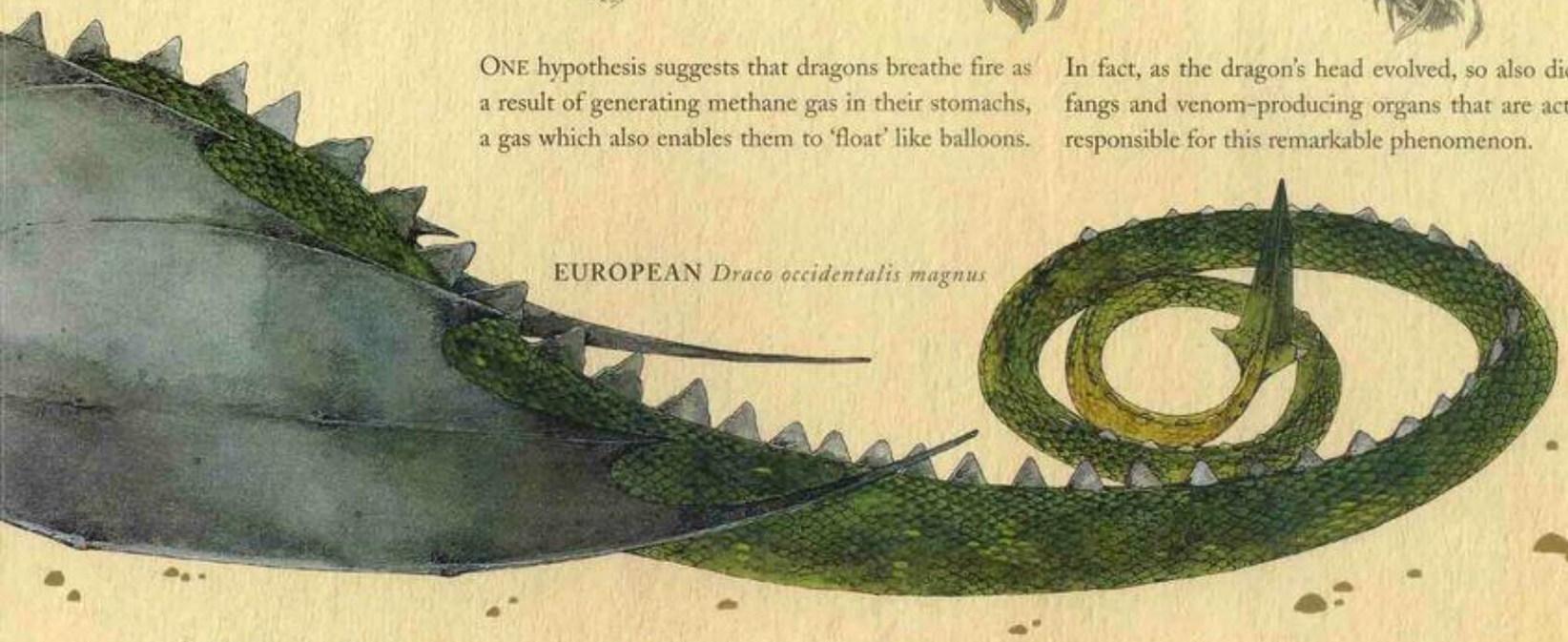


SOME argue that dragons cannot have four legs and two wings because no known vertebrate has more than four appendages. As can be seen in the above diagram, the evolution of a four-legged dragon's wings provides clear proof of Darwin's hypothesis of animal evolution through fortuitous genetic mutation.



ONE hypothesis suggests that dragons breathe fire as a result of generating methane gas in their stomachs, a gas which also enables them to 'float' like balloons.

In fact, as the dragon's head evolved, so also did the fangs and venom-producing organs that are actually responsible for this remarkable phenomenon.



EUROPEAN *Draco occidentalis magnus*

DRAGONS IN LEGEND.

Among all the kindes of Serpentes, there is none comparable to the Dragon, or that affordeth and yeeldeth so much plentifull matter in historie for the ample discovery of the nature thereof.— The student will do very well to heed these words of natural philosopher and dragonologist Edward Topsell, in his 1607 book, *The History of Four-footed Beasts*. For while there is little in dragon legend that is perfectly true, there is also little that is entirely false, and the student should seek information from any other available source, with an entirely open mind.

An example of foresight—a flame-proof cloak may prove invaluable.



'THE FIVE 'F's' of DRAGONOLOGY.

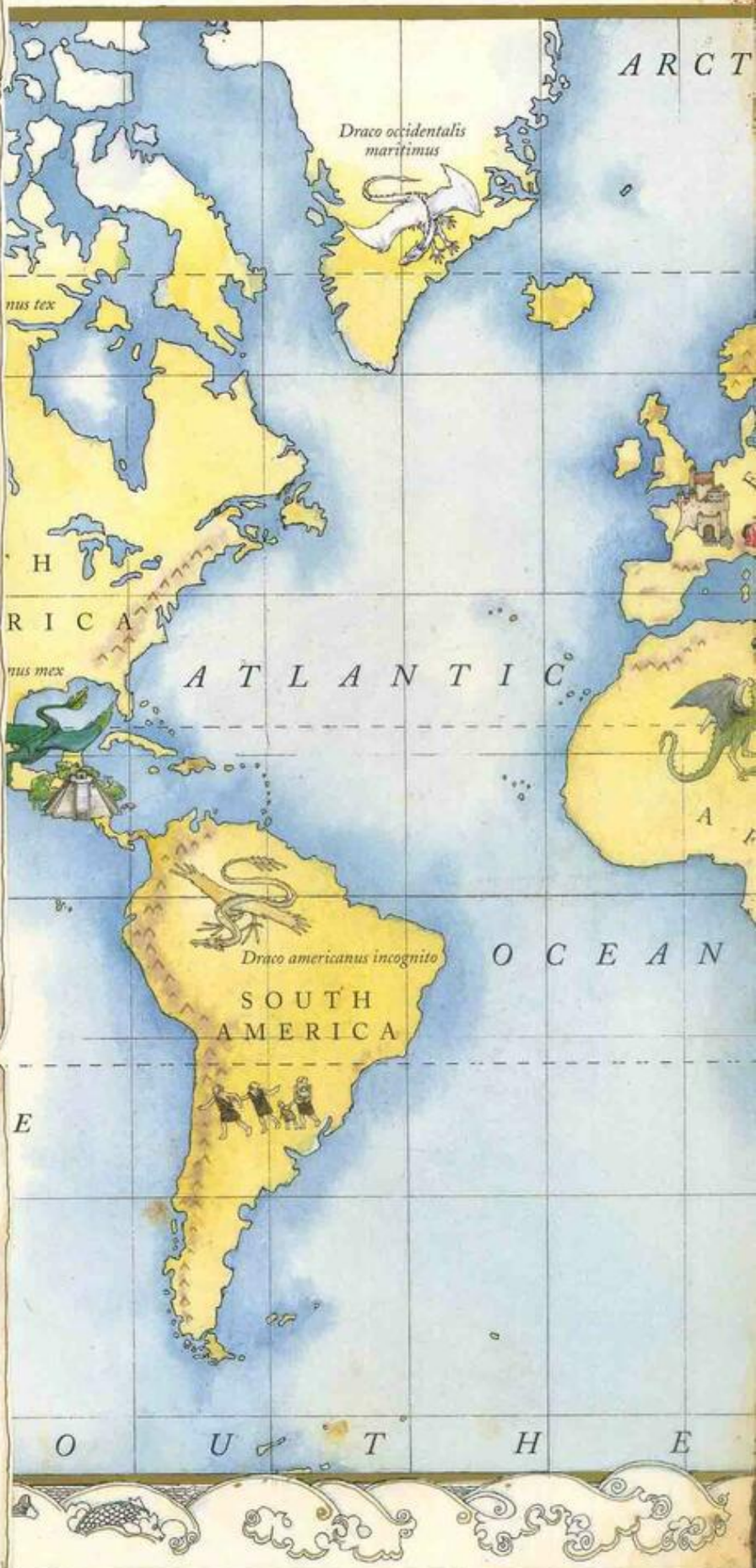
FIELDWORK—it is best by far to study dragons in their own environments. FORESIGHT—proper learning and preparation are absolutely essential. FORWARDNESS—the student must be both daring and truly courageous. FRANKNESS—one must simply report honestly what one sees at all times. FATALITIES—unless these are avoided, the student will make little progress.

CHAPTER I.

DRAGONS OF THE WORLD.
LOCATIONS & DIRECTIONS.

Dragons are indigenous to almost all parts of the world, so the student will never be faced with having to move thousands of miles to study them. This map shows the main locations of the primary species.





A NOTE ON SEA SERPENTS.

The sea serpent, be it a variation of *leviathan*, giant squid, or whale, has often been called the 'dragon' of the seas. However, it seems likely that the evolution of these creatures is entirely different from that of true dragons. The sea charts of the cartographer Olaus Magnus are considered the best for locating the sea lanes where these serpents most often lurk, lying in wait for their storm-tossed prey.

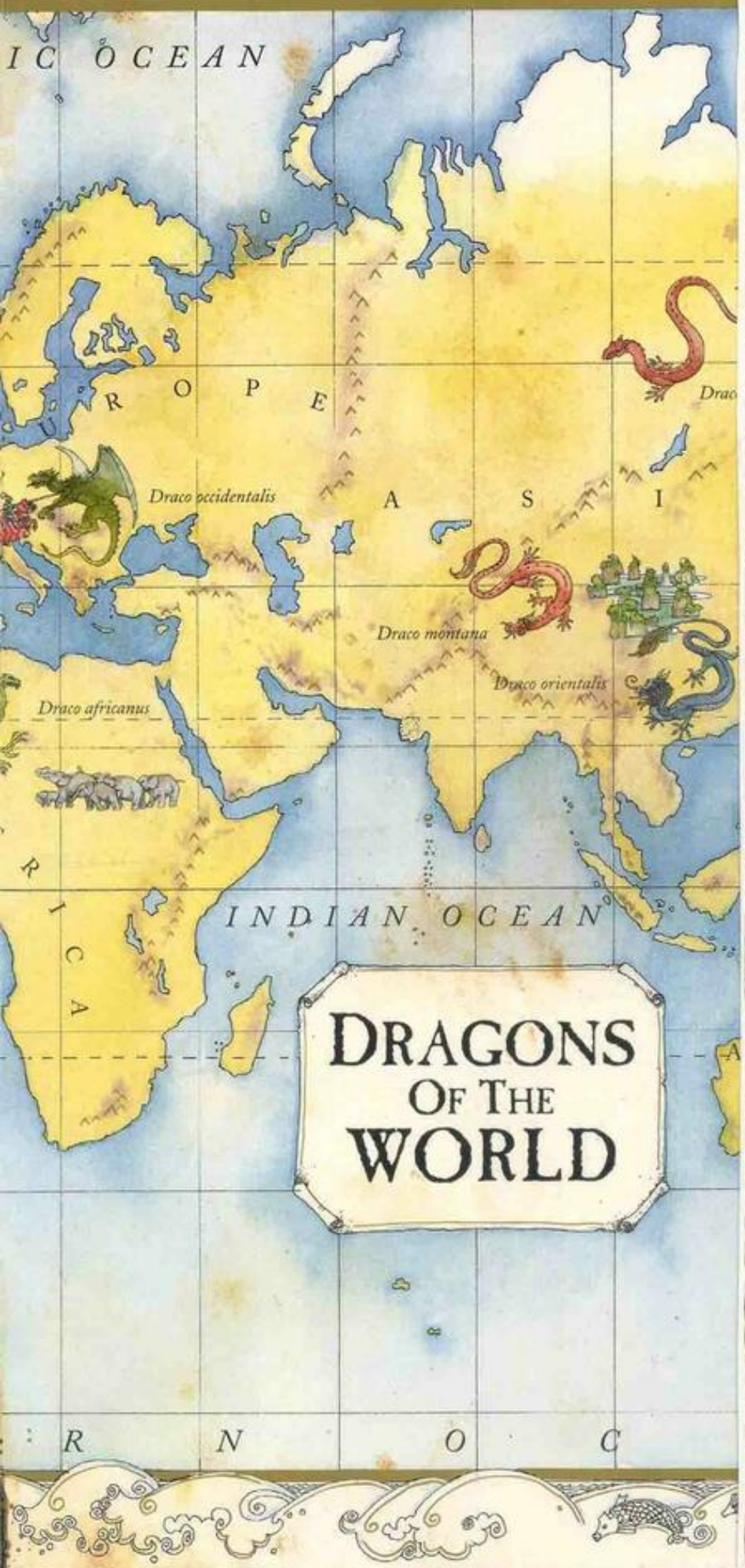
HOW TO TELL THE DIFFERENCE.

• Serpents do not breathe fire	• Dragons may breathe fire
• Cannot fly	• Fly
• Found in the sea	• Found inland or flying over sea
• Attracted to wooden ships	• Attracted to treasure
• Does not hoard treasure	• Hoards treasure

TRY THE
FAMOUS
DRACO
DRAGON-WHISTLE



Simply blow through the mouthpiece and the model dragon 'calls' in imitation of a live specimen, inducing a response in dragons nearby.
Sent on receipt of price 10 guineas to: Dr. Drake's Dragonalia, 10 Wyvern Way, London, England.



CLASSIFICATION OF DRAGONS BY HABITAT.

Given that dragons can fly, colonising the Earth has been easy for them. As a result, any dragon species may well be found in any region with the right habitat. European dragons, for example, have been known to inhabit remote areas of North America. This chart, showing the primary species, should aid identification in any area.

FOREST.

Knucker
Draco troglodytes
[4 legs, vestigial wings]



Marsupial dragon
Draco marsupialis
[4 legs, wings, fiery pouch]



MOUNTAIN.

European dragon
Draco occ. magnus
[4 legs, full wings, dark colour]



Asian *lung*
Draco orientalis
[4 legs, no wings, mane]



Tibetan dragon
Draco montana
[4 legs, no wings]



PRAIRIE & STEPPE.

Am. amphithere
Draco americanus tex
[no legs, mothlike wings]



Lindworm
Draco serpentalis
[2 legs, no wings]



ARCTIC REGIONS.

Frost dragon
Draco occ. maritimus
[4 legs, full wings, light colour]



DESERT & SAVANNA.

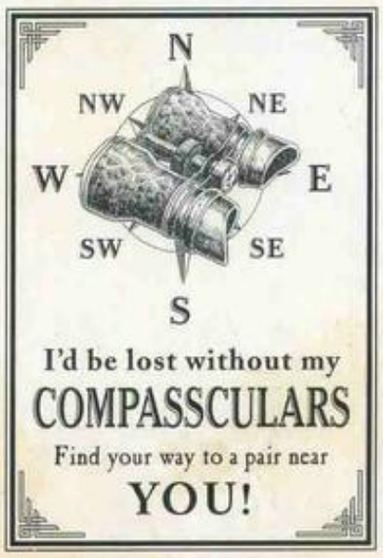
Wyvern
Draco africanus
[2 legs, full wings]



JUNGLE.

Mex. amphithere
Draco americanus mex
[no legs, feathery wings]





I'd be lost without my
COMPASSCULARS
Find your way to a pair near
YOU!

Don't get burned
when you buy a hat!

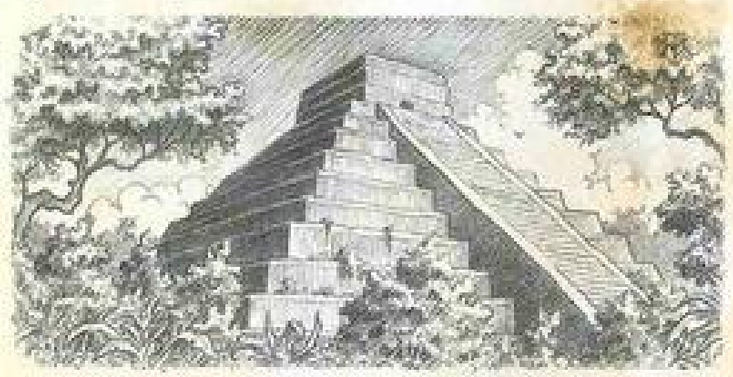


The latest thing! Get Dr. Drake's heat proof 'FLAMEAWAY' hat. HEAT-TESTED to 1000° for £15!



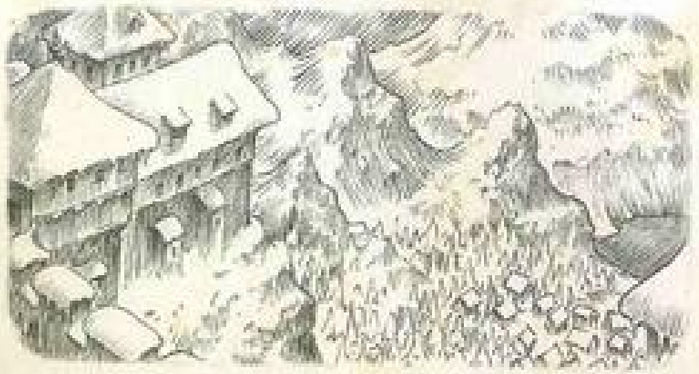
ICEBERG—GREENLAND.

Icebergs, such as the one shown here, provide ideal locations for Frost dragons to build their caves. As the icebergs drift southwards, the dragon finds it has less distance to fly when the migrating season begins and it departs for the Antarctic.



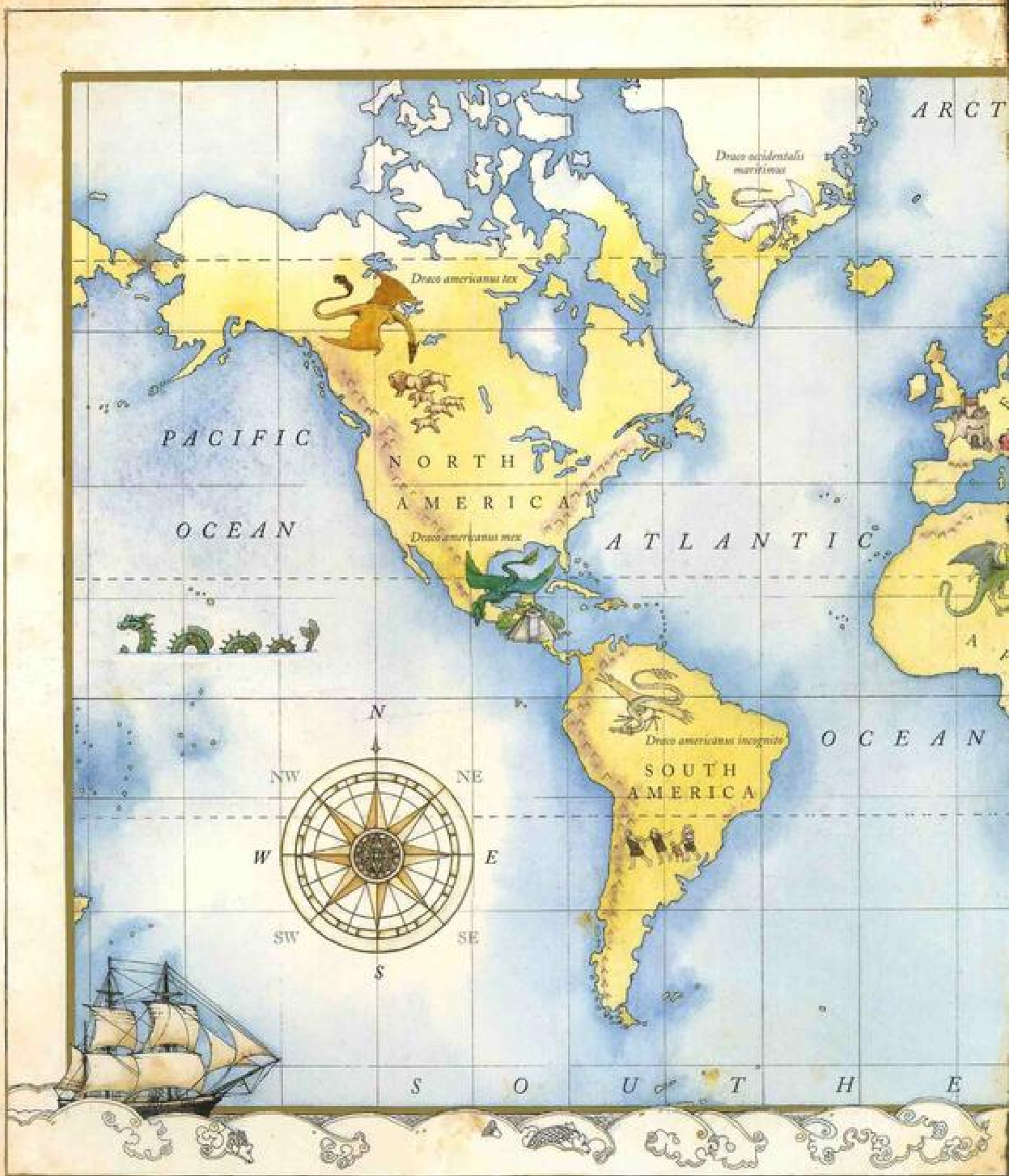
THE 'LOST CITY OF SERPENTS'—GUATEMALA.

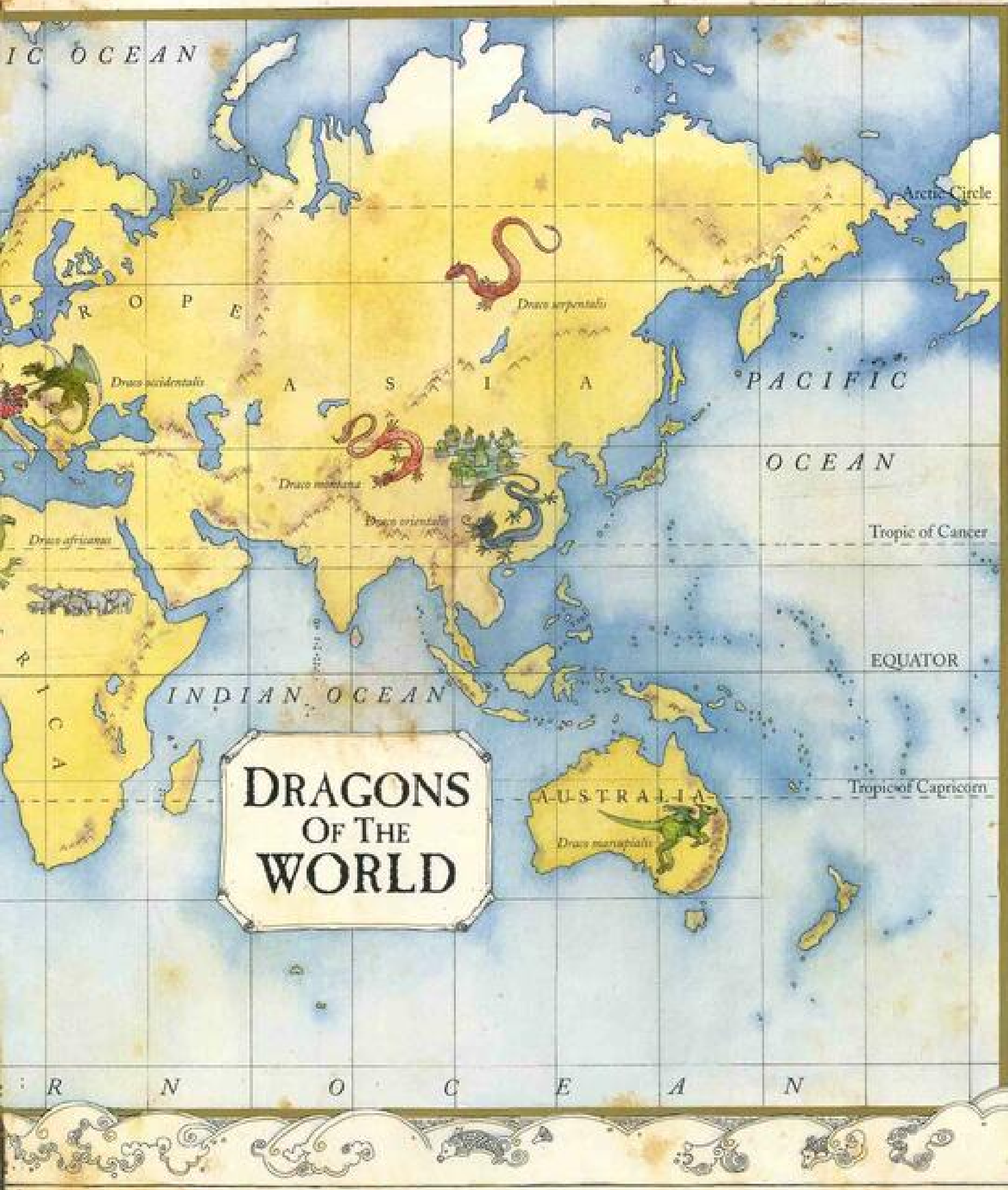
It is not known why Mexican amphitheres are often found near the ruins of jungle cities, such as this one in Guatemala. Perhaps they were once worshipped here as gods, or perhaps they played a role in hiding some of the legendary treasures from the conquistadors?



CASTLE DRACHENLAGER—GERMAN ALPS.

Alpine environments are perfect sites for some European dragons, who live in caves just above the tree line. Living among mountains, they can hide when necessary, and specialised climbing equipment is needed in order to even attempt the study of these elusive creatures.

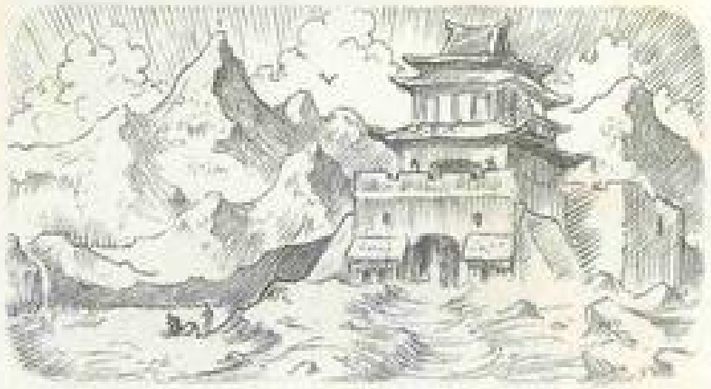






DRAGON MOUNTAIN—TIBET.

The habitat of the Tibetan dragon lies among the peaks of the great Himalayan range, at high altitudes crossed by harsh landscapes and dotted with monasteries. The monks appoint a dragon master from among their ranks to maintain good relations with the local dragon.



HONG WEI TEMPLE—CHINA.

Remote Hong Wei Temple in Fukien Province is located high up in the mountains. Famous for its waterfalls and cascades, it was traditionally home to four dragons who were held to be responsible for rain in the area, and for bringing good luck to the people.



KATOOMBA—AUSTRALIA.

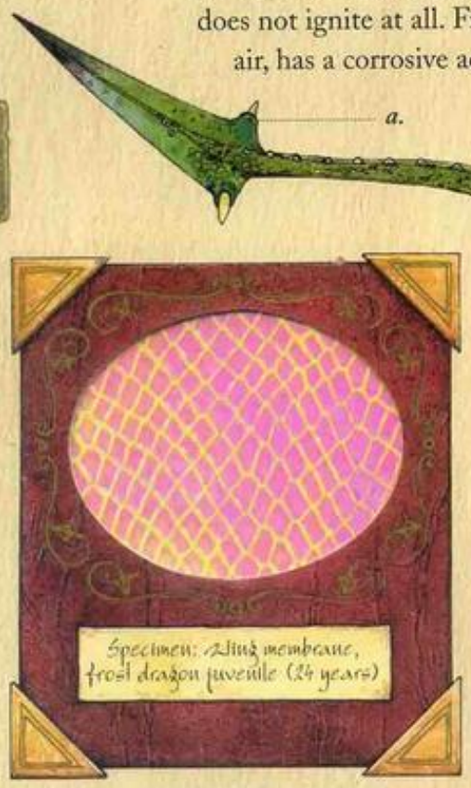
The Blue Mountains are named after an eerie blue mist that colours the whole landscape at sundown. Once thought to be caused by twilight vapours emanating from so-called blue gum eucalypts, we can now affirm that this is in fact the smoke of indigenous marsupial dragons.

CHAPTER II.

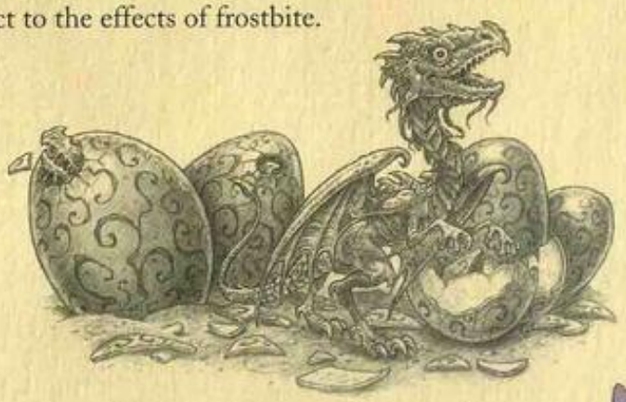
DIFFERENT SPECIES OF DRAGON.

WESTERN DRAGONS.

While it is likely that all of these Western dragon species are closely related, the keen dragonologist will note a number of interesting differences between them. For example, while the rich flame of the European dragon is produced from a combustible venom [see Chapter III], that of the knucker does not ignite at all. Frost dragon venom, on the other hand, sprayed in a mist through Arctic air, has a corrosive action that is similar in almost every respect to the effects of frostbite.



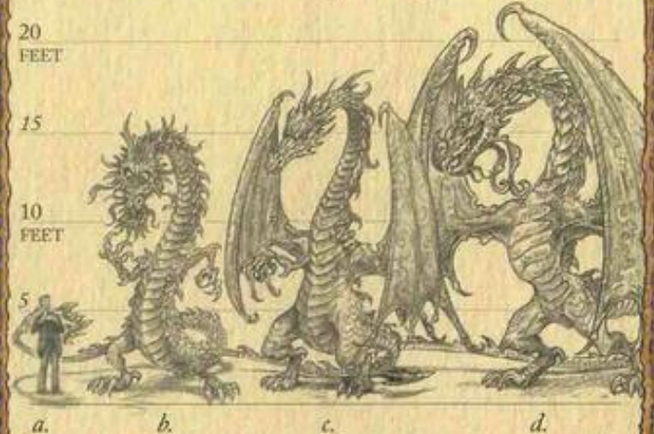
UNLIKE most reptiles, Western dragons spend much time caring for their egg-incubated young after they hatch, and a firm bond develops quickly between chick and parent.



No doubt but there is none other beeste comparable to the mightie dragon in awesome power and majestie, and few so worthie of the diligent studies of wise men—Gildas Magnus, *Ars Draconis*, 1465.



THE somewhat perilous science of dragometricity—or dragon measurement—has few living exponents. However, we can assert that adult wyverns are the tallest of dragons, standing some 20 feet *or so* in height, as may be seen in the following diagram. *a.* Human *b.* Chinese *Lung* *c.* European *d.* Wyvern

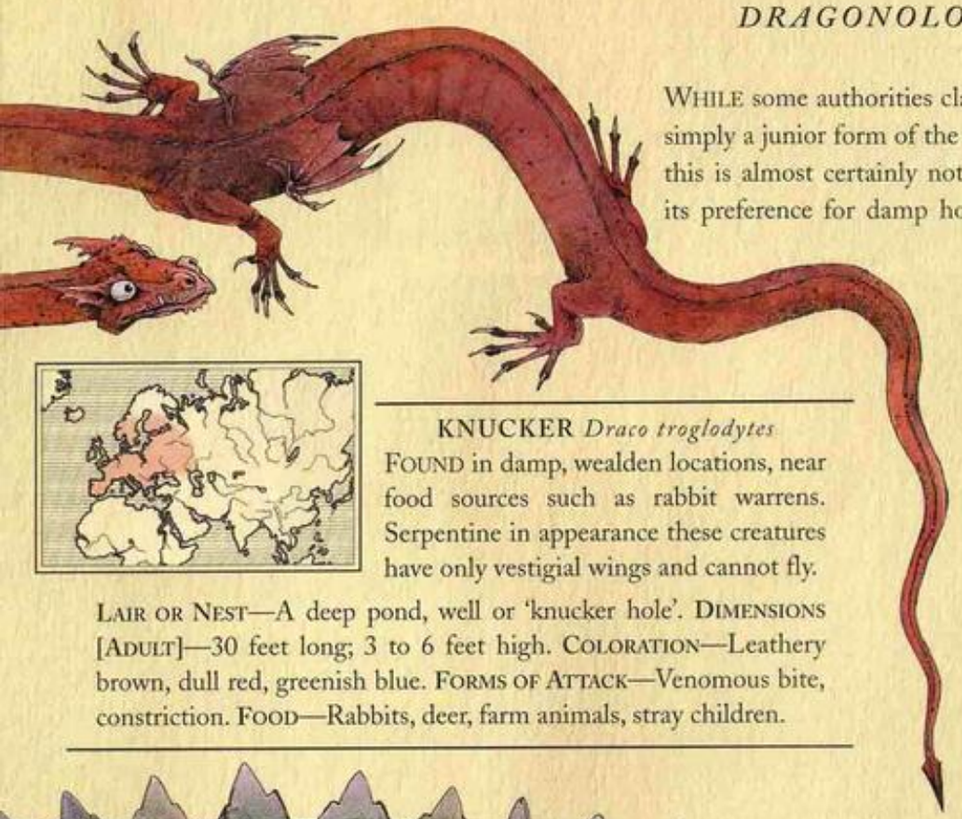




EUROPEAN *Draco occidentalis magnus*

KNOWN to most people through their ability to breathe fire and their love of treasure, this species is now confined to a few remote areas. Effective at using language, they shed their skins triennially.

LAIR OR NEST—A mountain or sea cave in a remote area. DIMENSIONS [ADULT]—45 feet long; 13 to 17 feet high. COLORATION—Red, green, black or occasionally gold. FORMS OF ATTACK—Flame, tail, claws, horns. FOOD—Cattle, sheep, humans [the latter only if no other food available—due to bitter flavour].



KNUCKER *Draco troglodytes*

FOUND in damp, wealden locations, near food sources such as rabbit warrens. Serpentine in appearance these creatures have only vestigial wings and cannot fly.

LAIR OR NEST—A deep pond, well or 'knucker hole'. DIMENSIONS [ADULT]—30 feet long; 3 to 6 feet high. COLORATION—Leathery brown, dull red, greenish blue. FORMS OF ATTACK—Venomous bite, constriction. FOOD—Rabbits, deer, farm animals, stray children.

WHILE some authorities claim the knucker is simply a junior form of the European dragon, this is almost certainly not the case. Indeed, its preference for damp holes and low-lying locations is in contrast to that of their larger cousins who prefer rocky, mountain areas. Also, although knuckers do hoard treasure, they will attack with venom rather than fire.





PROMINENT features of the European dragon:
a. 'arrowhead' tail—hardened for use in fighting
b. thick spines *c.* large bat-like wings
d. clawed talons *e.* scales *f.* horns
g. fanged teeth *h.* eyes—all dragons have a truly phenomenal sense of sight





FROST *Draco occidentalis maritimus*

ANNUAL Arctic—Antarctic migrators, frost dragons fly thousands of miles each year to ensure that they spend the greater part of the year in their favoured dark, winter climates hunting for food.

LAIR OR NEST—A sea-facing cave hollowed out from a glacier or iceberg. DIMENSIONS [ADULT]—40 feet long; 12 to 15 feet high. COLORATION—Pure white, or white tinged with blue or pink. FORMS OF ATTACK—Fearsome 'frosty blast', tail, claws, horns. FOOD—Giant squid, polar bear, orca, walrus, leopard seal.

DIFFERENT SPECIES OF DRAGON.

EASTERN DRAGONS.

It is interesting to note that, while legends of Western dragons portray them as vicious, bloodthirsty monsters, Eastern dragons are for the most part seen as benevolent helpmeets to mankind. The reasons for this most likely stem from the historical interactions that mankind has had with different species of dragon. Clearly some have been better neighbours than others.

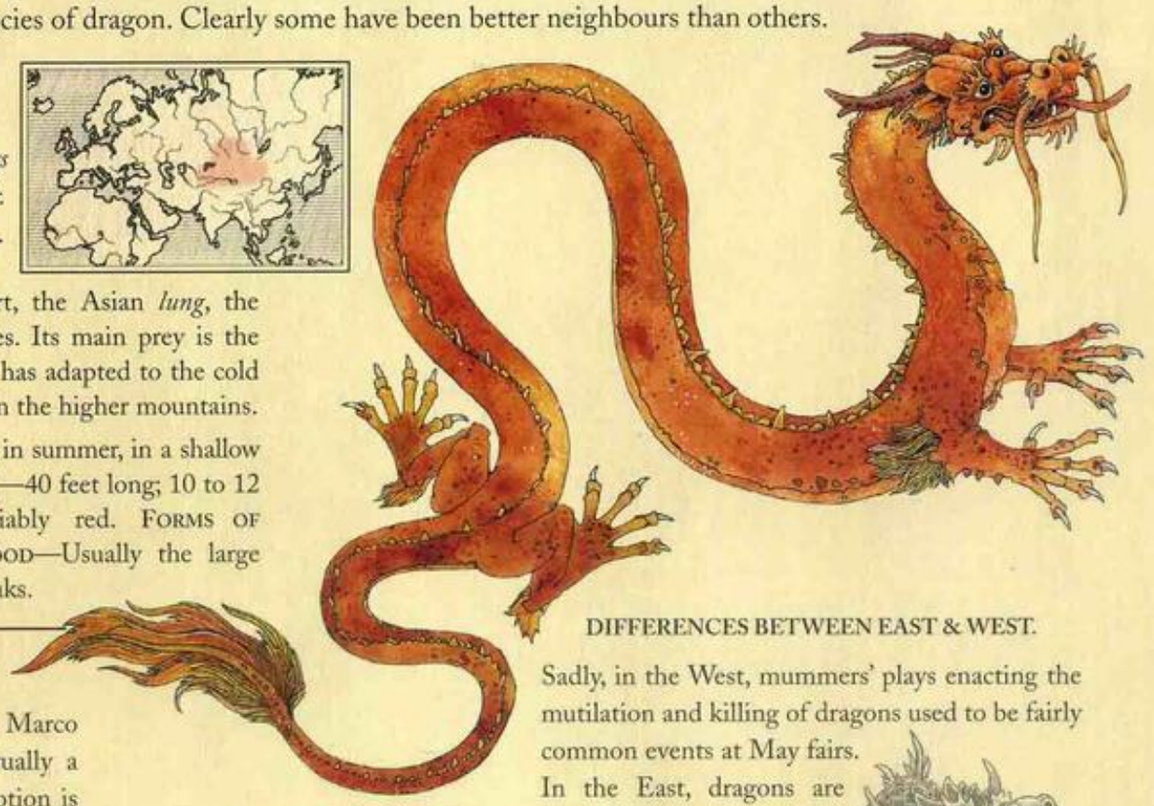


Some species of lung *lay their eggs in running water.*

TIBETAN *Draco montana*

THINNER and redder than its counterpart, the Asian *lung*, the Tibetan dragon is a lover of high altitudes. Its main prey is the Himalayan yeti, a large mountain ape that has adapted to the cold conditions and rarefied atmosphere found in the higher mountains.

LAIR OR NEST—On the open mountainside in summer, in a shallow den of snow in winter. DIMENSIONS [ADULT]—40 feet long; 10 to 12 feet high. COLORATION—Almost invariably red. FORMS OF ATTACK—Biting, or else constriction. FOOD—Usually the large mountain apes known as yetis, sometimes yaks.



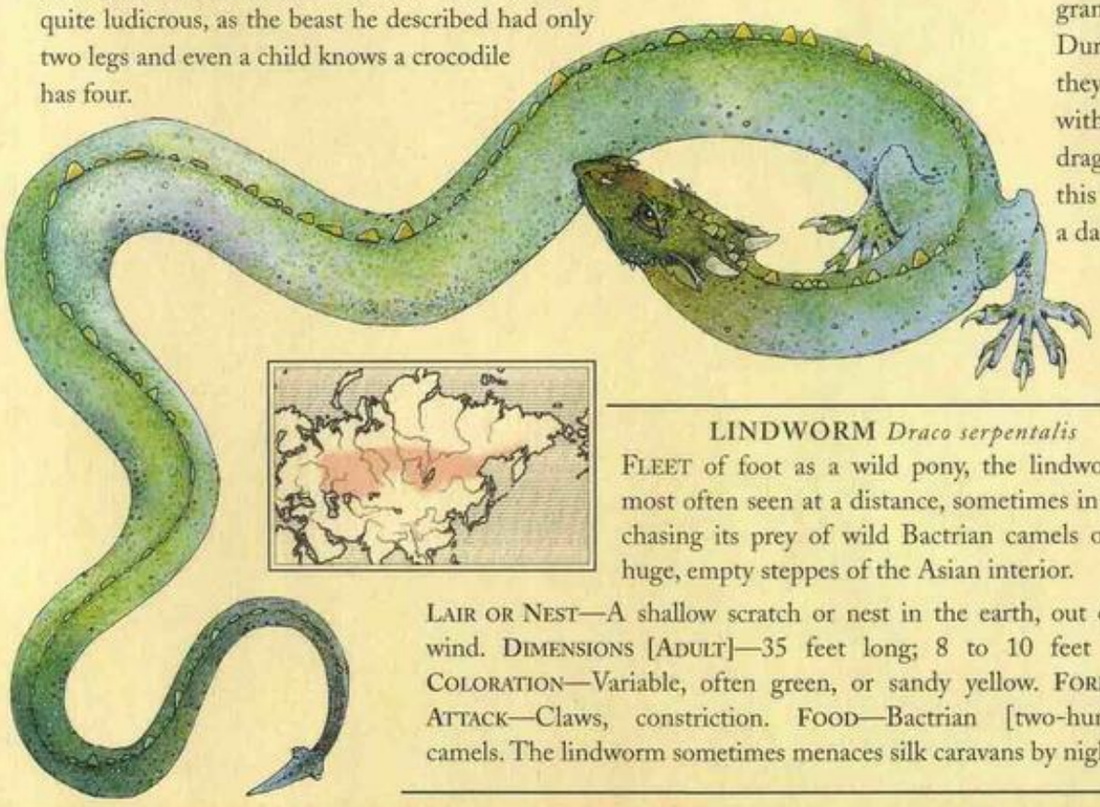
DIFFERENCES BETWEEN EAST & WEST.

Sadly, in the West, mummers' plays enacting the mutilation and killing of dragons used to be fairly common events at May fairs. In the East, dragons are granted a proper respect. During Chinese festivals they are often honoured with dragon boat races and dragon dances as shown in this scene depicting such a dance in Canton in 1884.



LINDWORMS.

For years it was thought that the explorer Marco Polo's description of a lindworm was actually a description of a Chinese crocodile. This notion is quite ludicrous, as the beast he described had only two legs and even a child knows a crocodile has four.



LINDWORM *Draco serpentalis*

FLEET of foot as a wild pony, the lindworm is most often seen at a distance, sometimes in pairs, chasing its prey of wild Bactrian camels on the huge, empty steppes of the Asian interior.

LAIR OR NEST—A shallow scratch or nest in the earth, out of the wind. DIMENSIONS [ADULT]—35 feet long; 8 to 10 feet high. COLORATION—Variable, often green, or sandy yellow. FORMS OF ATTACK—Claws, constriction. FOOD—Bactrian [two-humped] camels. The lindworm sometimes menaces silk caravans by night.



ASIAN *LUNG* *Draco orientalis*

LUNG are most often found near the rivers, streams and lakes that hide their underwater lairs. Females carry their eggs with them for safety, using the lairs to store the pearls and opals they hoard away. The number of toes varies across the various subspecies.

LAIR OR NEST—Usually an underwater cave or grotto. DIMENSIONS [ADULT]—40 feet long; 12 to 15 feet high. COLORATION—Blue, black, white, red or yellow. FORMS OF ATTACK—Horns, teeth & claws used defensively. FOOD—Mainly fish and birds, particularly roasted swan.





Japanese lung *have four toes, Indonesian three.*



Chinese or Imperial lung *have five toes.*



The lithe movement of this species has given rise to the erroneous belief that it too can fly.

CHINESE LUNG *Draco orientalis magnus*

The lung's *egg was once thought to be a huge pearl.*

PROMINENT features of Chinese *lung*:
a. long, whiskery feelers *b.* stag-like horns *c.* mane *d.* five toes on each claw *e.* egg—usually carried in foreclaw *f.* large scales *g.* feathery tail

LONG associated with all kinds of water, Asian *lung* were seen as having power over rainfall and storm. It seems likely that the four legendary Chinese 'dragon kings' were highly impressive specimens.

CHAPTER II.

DIFFERENT SPECIES OF DRAGON.
OTHER DRAGONS.

Apart from the primary Eastern and Western species of dragon, there are a wide variety of other species deserving of attention. Unfortunately, space is limited in such a wide-ranging tome, and so we must pass over the gargouille, the naga and many others, and deal instead with the most prominent dragons of Africa, the Americas and Australia.



WYVERN *Draco africanus*

UNLIKE most other dragons, the wyvern only has two legs. However, being the largest form of dragon it finds these perfectly sufficient for carrying off its elephant prey.

LAIR OR NEST—A rocky crag, or occasionally a circular nest in an area of sand dunes or grass. DIMENSIONS [ADULT]—50 feet long; 18 to 20 feet high. COLORATION—Muddy brown to lime green. FORMS OF ATTACK—Teeth, claws, lashing tail, dropping from great heights. FOOD—Elephants, hippos, rhinos or other large herbivores.

WYVERNS.

Two early geographers, Herodotus and Pliny, both mention the wyvern's taste for elephants. It is possible that the giant elephant-hunting bird of Arabian legend, the Roc, was an early case of mistaken identity.

d.

c.

b.

a.

PROMINENT features of the amphithere: *a.* hypersensitive eyesight *b.* feathery frill around head *c.* legless, serpentine body *d.* very large wings *e.* feathery tail

Study of the amphithere skeleton reveals vestigial legs.

THE PHOENIX.

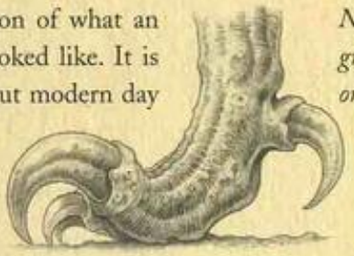
The *archaeopteryx* fossils discovered in 1860 and hailed as the 'missing link' between reptiles and birds, helped many people to understand Darwin's *Origin of Species*. In reality these fossils belonged to a primitive form of phoenix, a 'bird' that uses a highly effective fire-bath in order to rid itself of parasites, and in fact the 'missing link' between reptiles and amphitheres. Sadly, phoenixes are so scarce that until recently there was thought to be only one specimen in existence.



A fire-bath improves the phoenix's plumage so much that people thought it 'died' and was 'born again'.



THIS close up shows a reconstruction of what an amphithere's foot may once have looked like. It is not known why the feet were lost, but modern day amphitheres use their serpent-like tails to 'strangle' and carry off their hapless prey.



Note the tremendous gripping power in the original claw, now lost.



Amphithere feathers have a sparkling, golden appearance.

e. _____

The Mexican amphithere almost certainly inspired the warlike Aztecs in their descriptions of their god, Quetzalcoatl.



AMPHITHERE *Draco americanus*

IN addition to the well-known Mexican feathered amphithere, there is a furry North American variety that primarily hunts buffalo and has sometimes been mistaken for a gigantic moth.

LAIR OR NEST—Among the reeds on lakesides or off-shore islands. DIMENSIONS [ADULT]—45 feet long; 5 to 10 feet high. COLORATION—Green. FORMS OF ATTACK—Flaming breath, tail lash, constriction. FOOD—all the large indigenous mammals of the Americas, typically llamas in the south and buffaloes in the north.

MARSUPIAL DRAGONS.

It is interesting to note that marsupial dragons are found not only in Australia but also in the Patagonian region of South America, half a world away. There are a number of other marsupial creatures that have been discovered here too that exist nowhere else in the world. One might almost speculate that Australia was once attached to South America aeons ago, if the notion were not so preposterous!

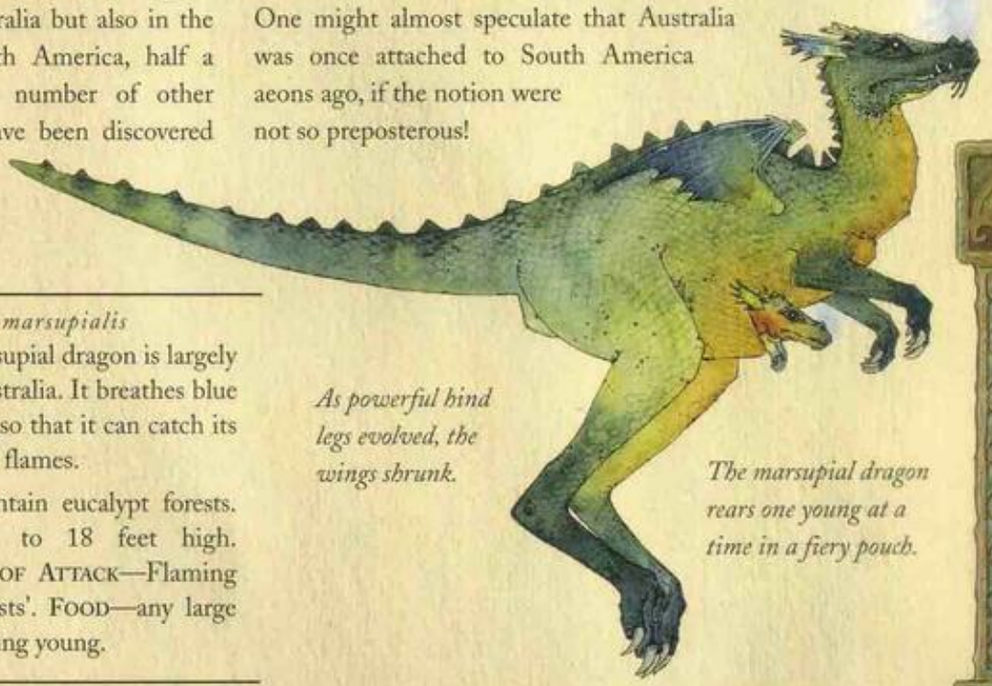


As yet, little is known about the vast Australian interior.

MARSUPIAL *Draco marsupialis*

THOUGHT to be extinct, the marsupial dragon is largely confined to the south east of Australia. It breathes blue smoke and often starts bushfires so that it can catch its prey as they are driven before the flames.

LAIR OR NEST—Rocky caves in Blue Mountain eucalypt forests. DIMENSIONS [ADULT]—25 feet long; 15 to 18 feet high. COLORATION—Green or blue-ish. FORMS OF ATTACK—Flaming breath, lashing tail, kicking feet, boxing 'fists'. FOOD—any large marsupials; smaller prey are sought while rearing young.



As powerful hind legs evolved, the wings shrunk.

The marsupial dragon rears one young at a time in a fiery pouch.

THE NATURAL HISTORY OF DRAGONS.

DRAGON BIOLOGY & PHYSIOLOGY.

Most species of dragons are reptilian and share many features of this animal type such as egg laying, although they also care for their young. They are unusual in that they are the only creatures who can speak with meaning apart from humans. However, not all dragons have managed this feat, and it seems likely that it is only the older, more experienced dragons who have developed this skill.

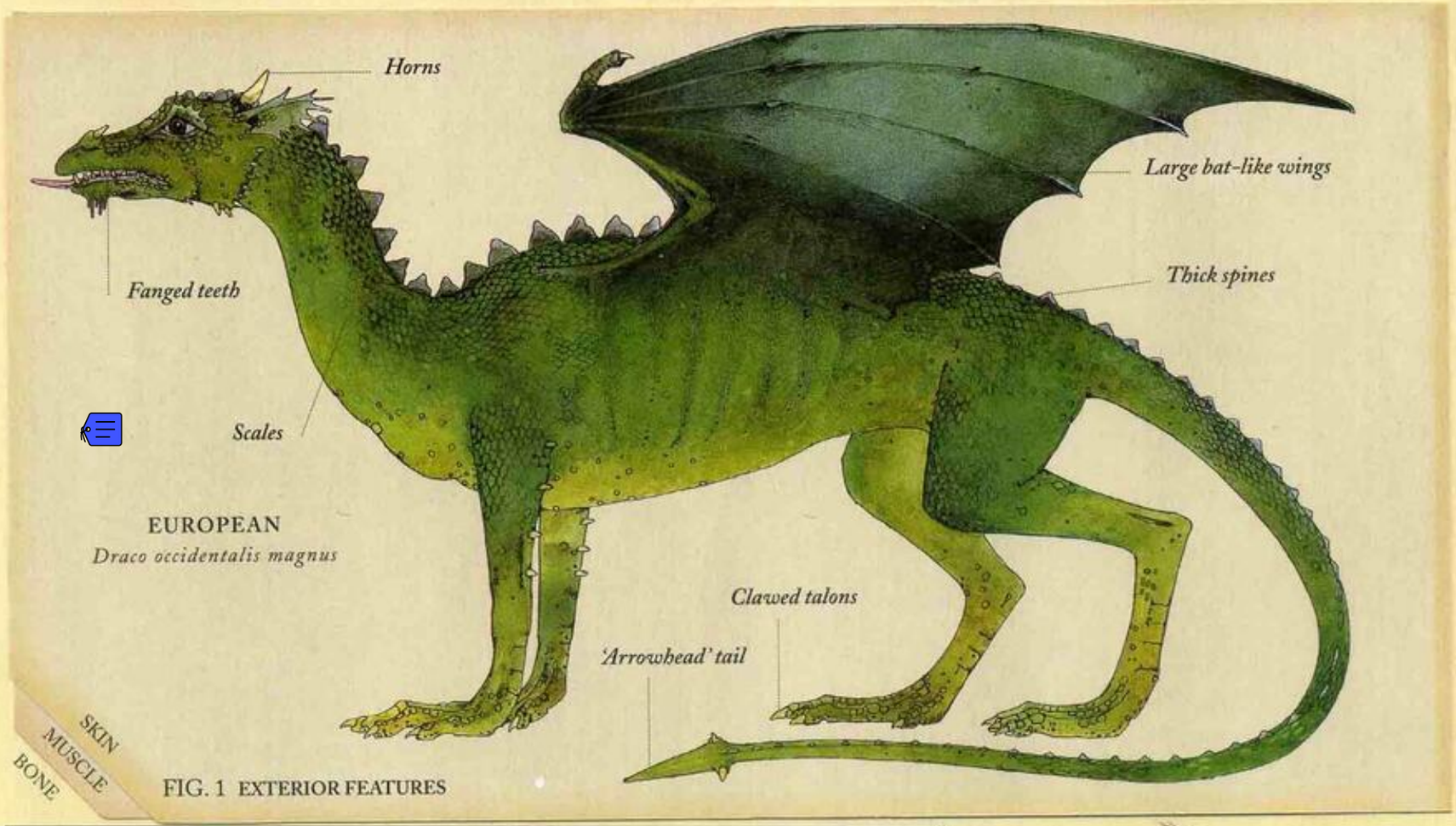


FIG. 1 EXTERIOR FEATURES



THE laws of flight say that dragons, like bees, can't fly, when in actual fact they can. Their aerial skill is assisted by the dragon's ability to bend its wings and rotate them quickly in their sockets and also by the fact that dragon bones are lightweight and hollow like those of birds.



WINGS.

In this picture one can see how the surprisingly bat-like wings of the European dragon are affixed to the small 'fingers' that can be used to aid the dragon in climbing sheer cliffs [and by extension, tall buildings].

DIFFERENCES BETWEEN EASTERN & WESTERN.

By comparing this Chinese dragon skull with the European dragon skull below, differences in the essential shape of eastern and western species can be seen.

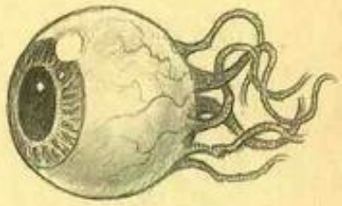
Dragon bones are not often found because of their very fast rate of decomposition.



SIGHT.

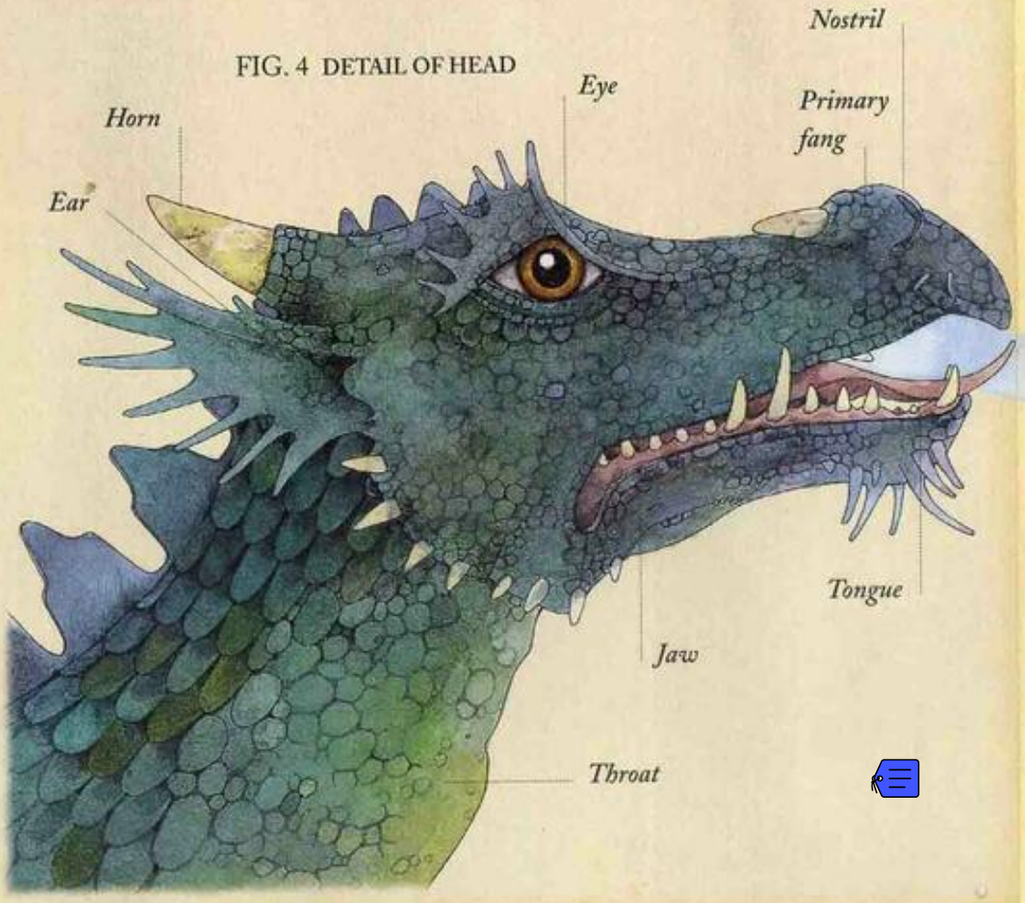
Dragons have the best sight of any animal and were sometimes slain so their eyes could be used in telescopic lenses. It may be that Galileo used a dragon lens in his very first telescope, before realising that fairly good lenses could be made by grinding glass.

A dragon can spot a valuable gem from 6000 feet.



A dragon's eye has six optic nerves, used to see light in different parts of the spectrum.

FIG. 4 DETAIL OF HEAD



A dragon's fire can reach a temperature of 1000 degrees!



FEEDING & DIGESTION.

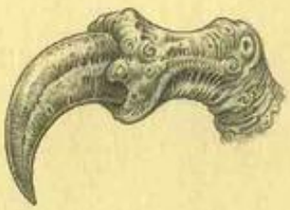
Digestion is fairly straightforward in dragons. In general, a dragon will eat its prey whole where this is practicable. If not, it may rip it into tasty chunks that are small enough to eat. A dragon feeds once every few weeks. Sometimes when a tough specimen is eaten, or one with a hard, armoured exterior, the dragon will regurgitate its prey at leisure in order to 'shell' it and flame-grill it to a more succulent tenderness.





SCALES.

The hard scales of the dragon are capable of resisting most projectiles, and can be worked into bullet-proof armour using steel rivets.



CLAWS.

Made of keratin, like our own hair and nails, dragons must be careful to avoid breathing fire on their claws or they stink horribly.

THE NATURAL HISTORY OF DRAGONS.

THE LIFE CYCLE OF DRAGONS.

DRAGON EGGS:



European Egg



Knucker Egg



Frost Egg



Wyvern Egg



Amphithere Egg

Dragons have a life cycle that resembles that of lizards, although they actively learn some aspects of their resulting adult behaviours when young, unlike most lizards whose behaviours are innate. Their gestation process may best be studied by rearing dragon chicks, but these creatures must be released into the wild at maturity, not into the New York sewerage system as occurred in one case in 1862.

THE first stage: development of embryo of *Draco occidentalis.*

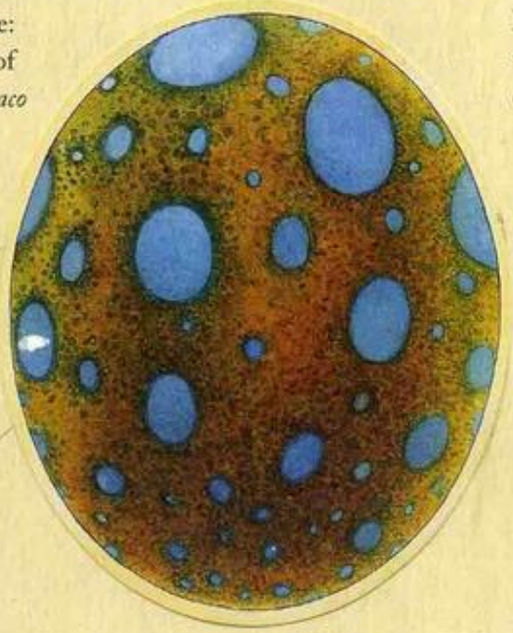


FIG.1 THREE MONTHS.

IN the second stage the features become discernible.

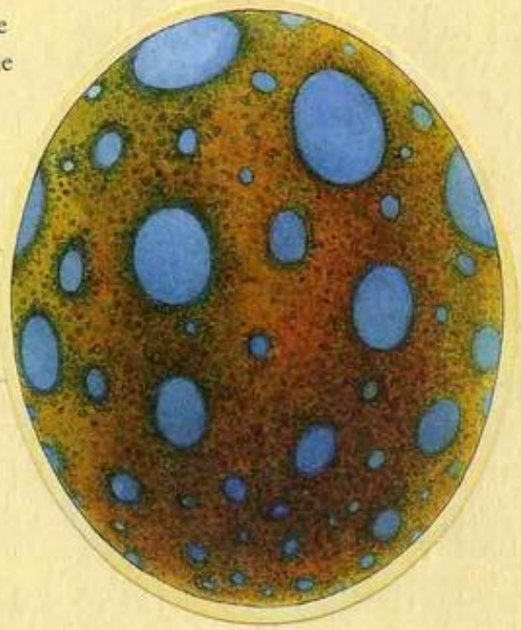


FIG.2 TWELVE MONTHS.

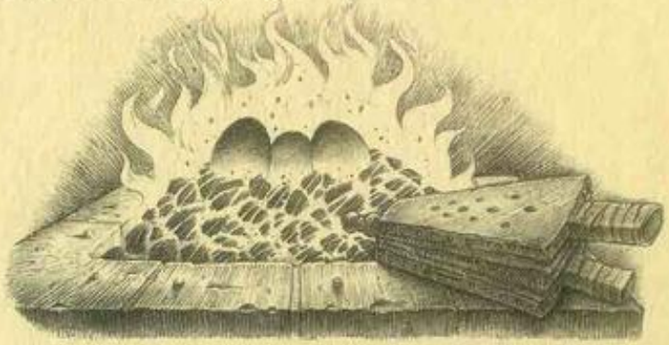


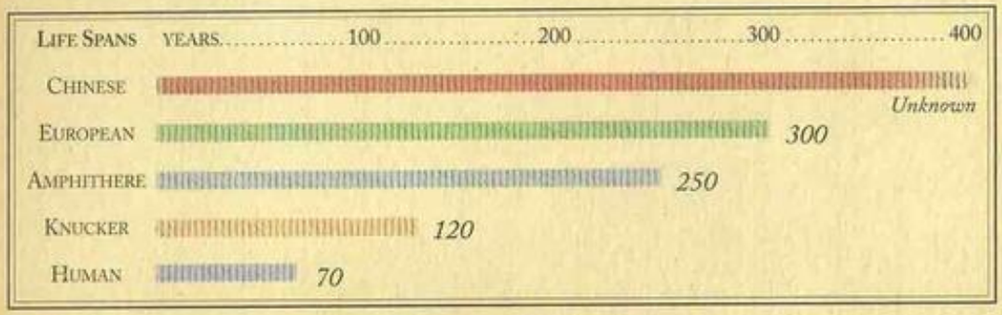
A DRAGON'S NEST.

A dragon's nest need not be soft, for dragon eggs are highly resilient, but it must be warm. However, the eggs retain heat very well. Generally, a nesting mother breathes a jet of flame over her eggs every three or four hours. Lindworm and wyvern pairs share nesting duty, whereas only female European dragons care for their nests.

THE DRAGONOLOGIST'S HATCHERY.

If you can obtain the eggs, you might like to hatch your own dragon chicks. To keep the eggs warm you need to make a 'nest' of live coals, which must be kept burning over the gestation period of three years. A small sledgehammer may help them hatch and, if you are present, the chicks may believe you are their parent dragon, usefully increasing your chances of surviving that all-important first encounter.





HOW TO ESTIMATE AGE.

Dragons are difficult to age. They shed skin bi- or triennially and grow a certain amount every year so it is possible to make an estimate from their size. Sometimes the dragon's memory of historical events can help. Dragonologists estimate a lifespan of around 300 years for a typical European dragon. However, no one has any idea how long Chinese *lung* live for.

IN the third stage an 'egg horn' develops to aid the chick in chipping open the hard shell.

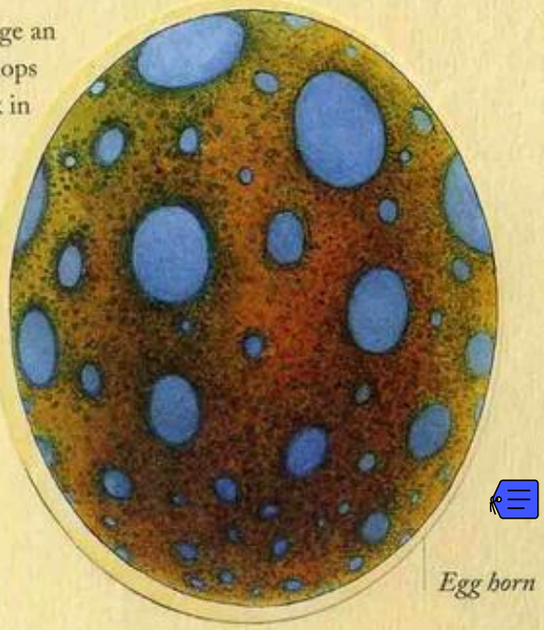


FIG.3 TWENTY-FOUR MONTHS.

AT birth, the horn and tail differences between male and female chicks are in evidence.



FIG.4 THIRTY-SIX MONTHS.



Dragons enjoy tasty treats!

REARING INFANTS.

Keep an adequate food supply. A 40- to 50-acre farm with a head of 300 cows should be enough for one chick. Small treats such as turkeys, dogs, cats, mules or geese may be used as rewards for all-important house training, as a chick learns that setting fire to your home is not acceptable behaviour.

SIGNS OF GROWING MATURITY.

There are a number of behaviours that show a chick is nearing maturity, and will soon seek to leave the nest.

Hoarding The chick collects precious objects from around the house, reluctant to return them.

Fire play The chick seeks out iron and flint objects and plays by making huge showers of sparks.

Language Chicks repeat any words and phrases they hear repeatedly, in a parrot-like fashion.



Hoarding behaviour, often misdirected towards inappropriate objects, such as this penny-farthing bicycle, is seen in chicks from an early age.

POINTS TO REMEMBER:

Keep iron and flint objects away from chicks, or live in a fire-proof house.

Do not release young dragons into the sewerage systems of a large city.

Mind your language around chicks—they may repeat what you say over and over in front of visitors.

It is not recommended to leave children and hungry dragons alone.

Hide all shiny or valuable objects.

CHAPTER III.

THE NATURAL HISTORY OF DRAGONS.
DRAGON BEHAVIOUR.

The behaviour and feeding habits of dragons have evolved to enable their survival as a species. They share most of these traits with other animals, but two unique habits are the dragon's love of hoarding and their ability to speak human language. While there are many theories that relate to the dragon's hoarding imperative, so far no one has found a credible reason for their linguistic abilities.

'TAME' BEHAVIOURS.

As a result of their interactions with humans, Asian *lung* have been known to exhibit 'tame' behaviours. They are quite ready to accept gifts of food, provided that it is of a suitable quality, and some Chinese temples have a monk whose primary task is the preparation of succulent meals for the local dragons.



In preparing a meal, only the very finest and best ingredients should be chosen.

COURTING BEHAVIOUR.

Like the bower birds of New Guinea, the male dragon woos a female by creating an elaborate 'nest' decorated with treasures selected to please. Frequently, as can be seen below, a male will attempt to gain favour with his bride by presenting her with a particularly choice gemstone.

The larger species seek a mate every 28 years or so.

EUROPEAN *Draco occidentalis magnus*



HOARDING BEHAVIOUR.

The hoarding behaviour of dragons most likely evolved because dragons have a soft, unarmoured 'Achilles spot' on their bellies. When they lie on treasure, some of the jewels stick, providing them with protection in their one vulnerable area. The dragons who evolved this hoarding behaviour were the ones who survived. Those who did not are no longer with us.



Ruby



Emerald



Amethyst



Diamond

LANGUAGE.

This area of dragon behaviour is a mystery. They are the only creatures apart from humans who both speak and, when occasion demands, write. Particularly interesting is the Western dragon's well-known taste for riddles and language games.

DRAGON SCRIPT.

ᚨ	A	ᚾ	N
ᛒ	B	ᛟ	O
ᚲ	C-K	ᛈ	P
ᛞ	D	ᚱ	R
ᛖ	E	ᛊ	S
ᚠ	F	ᛏ	T
ᚷ	G	ᚢ	U-V
ᚺ	H	ᚹ	W
ᛁ	I-J	ᛉ	X
ᛚ	L	ᛇ	Y
ᛗ	M	ᛣ	Z

LIKE tigers, weak or old dragons who cannot hunt their usual prey may become man- or rather maiden-eaters. This is because maidens are more likely to wear jewellery containing favourite dragon gems such as the diamonds, rubies, emeralds or amethysts shown on the right.

CHAPTER IV.

WORKING WITH DRAGONS.
FINDING & TRACKING DRAGONS.

There is no more satisfying activity for the dragonologist than that of studying dragons in the wild; it is the best way of enhancing our knowledge of these creatures. While armchair science has its own rewards, the achievement of tracking and locating a dragon and, hopefully, reaching a position of acceptance and trust will allow the student to put into perspective all that has been so diligently learned.

Encourage a dragon to the cave mouth with an offering of a suitable gift. Remember that dragons cannot easily be fooled!



WHERE TO LOOK FOR DRAGONS.

Referencing the map and table [after Chapter I] one may be in a position to determine what sort of terrain each type of dragon is most likely found in. Above is the perfect sort of mountain location with a large cave where a Tibetan dragon may be located.

CONCEALMENT is recommended until a sense of trust has been built up. Sadly, fatalities have resulted from very young, inexperienced dragonologists being too keen to introduce themselves too soon.

TELL-TALE SIGNS OF DRAGON ACTIVITY.

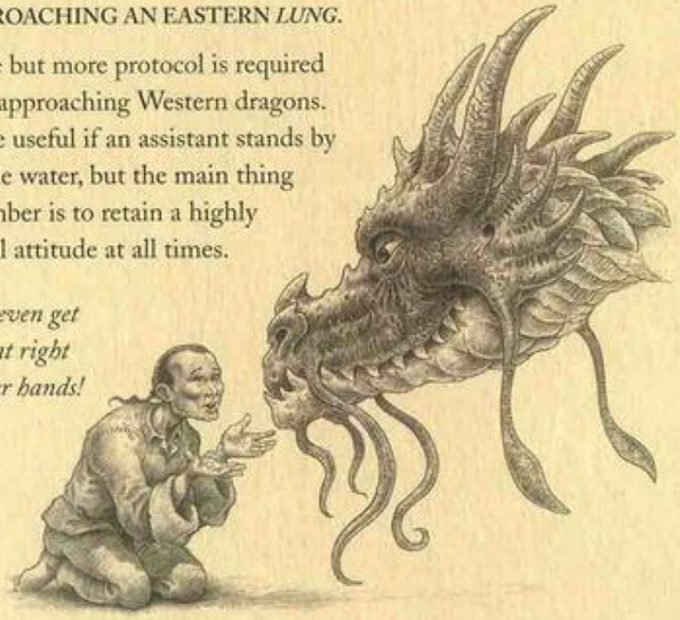
To the experienced eye, it is easy to tell at once when a dragon's range has been entered, and exactly what dragon is being encountered.

- *Footprints & tail swishing marks.*
- *Burned & scorched trees and undergrowth.*
- *Small, depleted-looking flocks of sheep.*
- *Frightened villagers, with excitable children.*
- *A tendency for the locals to eschew jewellery.*
- *Local legends about dragon activity, often dismissed as 'smuggler's tales' to keep people away.*
- *A local hotel or hostelry with a reputation for eccentric visitors [likely to be rival dragonologists or newspaper 'hacks' hot on the trail of a 'scoop'].*

APPROACHING AN EASTERN *LUNG.*

Less care but more protocol is required than for approaching Western dragons. It may be useful if an assistant stands by to provide water, but the main thing to remember is to retain a highly respectful attitude at all times.

You may even get lung *to eat right out of your hands!*





Chinese



Wyvern



Knucker

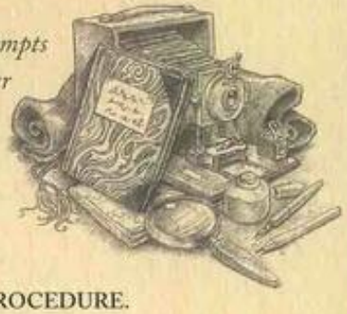


European

ESSENTIAL EQUIPMENT.

Over time, each dragonologist will build up his own list of essential equipment. Here is a basic list:

- *A notebook, to preserve all important records. Ideally this should have a heat-proof cover.*
- *A heat-proof pen and ink. 2B sketching pencil.*
- *A reasonably powerful magnifying glass.*
- *Special, heat-protective clothing.*
- *A relief map of the area, that shows both flora-types and geological formations.*
- *A camera, although all attempts to photograph dragons so far have been failures.*



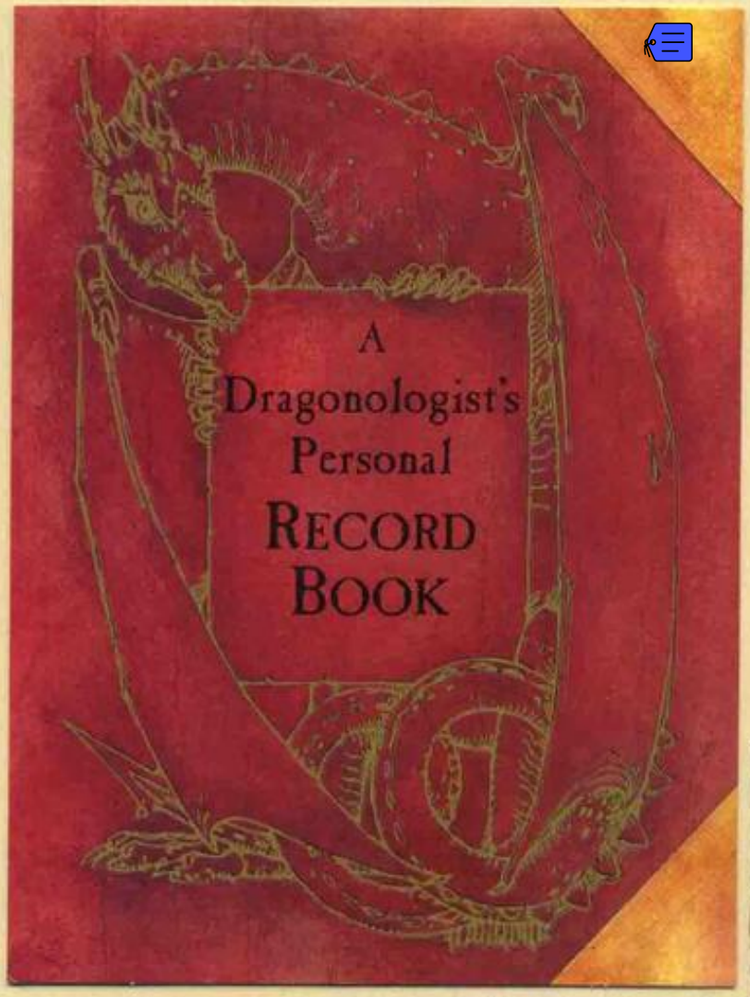
FIELD PROCEDURE.

Upon discovering signs of dragon activity such as footprints [see left], the scientific dragonologist will record precise details of the event: the location, time, date and weather conditions. This should be repeated over a number of days. Feeding and behaviour should definitely be noted, although not at such a range as to make it an unpleasantly personal experience. Attempts at interaction should be included, whether they involve speech or spells. One should take care to take nothing from a dragon as this will not only cause grave danger to the dragonologist but may also provoke a fiery retribution to any other people who live in the surrounding area.

DANGERS IN THE FIELD.

While the dangers of suffering from bites, burns, slashes from claws, death-by-constriction, tail lashings, venom attacks and so forth should never be underestimated, the lesser danger of hypnosis is often ignored. The mechanism for this is little understood, but it seems to occur in a similar way to that seen when a snake hypnotises a frog. Dragons can hypnotise large groups of individuals at one time, and the effects may last for some months, with the hypnotised person often found apparently carrying on their everyday life. The signs are easy to read: an obsession with dragons, wizards, fairies or tales of other worlds. A mad delight in fantastic illustrations and ideas. A dislike of human rules or authorities. Luckily, there is a tried and trusted method that may be used as a sure remedy:

- *A person who has been hypnotised by a dragon should be made to do a large number of complicated mathematical sums.*
- *All books on dragons, wizards or suchlike should be confiscated, and books on stimulating topics—politics, economic theory, the history of benzene in the manufacturing industries etc.—should be substituted.*
- *Exhortations to the person to "snap out of it" or to "stop living in cloud-cuckoo land" are rarely successful.*



CHAPTER IV.

WORKING WITH DRAGONS.
TAMING & FLYING DRAGONS.

While it is nearly always best to study dragons in the field, there may be times when it is necessary to befriend them, or to temporarily render them tame. A good example of such a need would be when the location where a dragon dwells is in imminent danger of being overrun with human activities such as mining or logging. In this case an attempt must be made to move the dragon to another suitable but currently dragon-free location.

Keep a firm hold on the reins. This will not harm the dragon.

Dragons fly at higher altitudes than most humans can tolerate.

TAMING DRAGONS.

While there are various methods of taming dragons, they all have a merely temporary effect on those that were not raised from the egg. See Appendix II for a spell that will tame dragons. Potions have also been used. Remember it is possible that a dragon will be angry on recovering from a taming, especially if they were embarrassed or compromised in any way.

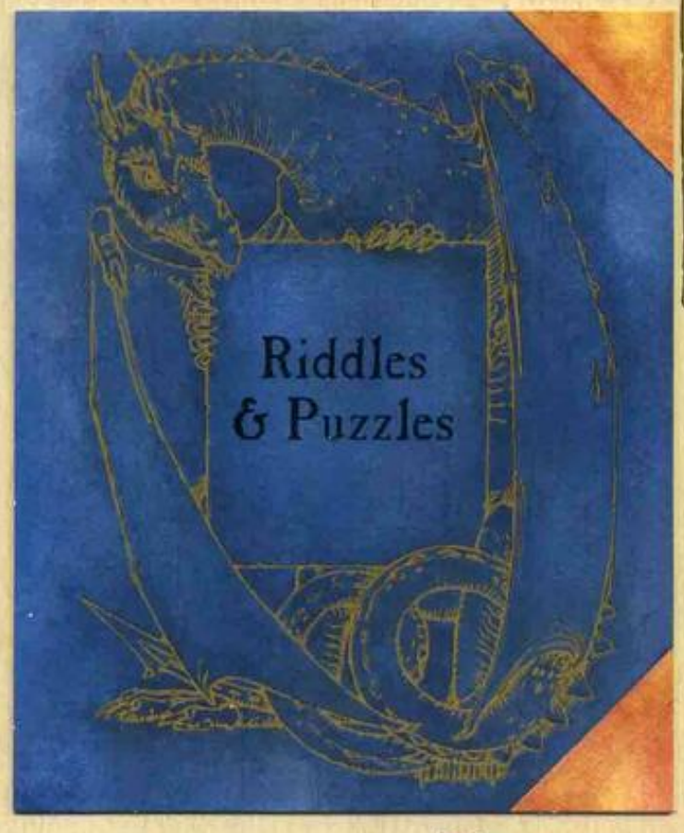
A bespoke saddle and harness should be commissioned from a discreet saddler.



The sages of Arabia developed a number of potent methods to tame dragons.

BEFRIENDING DRAGONS.

It is far better to befriend dragons rather than tame them. As they love to hoard, the offer of treasure will at least encourage the ones who can speak to give you a hearing, but especially beware of taking the advice of dragons at face value as they are incredibly wily. Above all, dragons who can speak seem to love riddles and word games, and traditionally any human who could outwit them in a riddle contest gained their respect.



The dragon's tail is used for balance and lateral stability in flight.

A looping manoeuvre is possible if enough speed is achieved. A happy dragon is a dragon which loops.



The dive and swoop of a hunting dragon can be useful for taking a closer look at ground features.

FLYING TECHNIQUES.

Attempting to ride on a dragon should only be done in cases of dire need, or with a dragon's express permission. With the right harness and equipment it is possible to achieve a number of manoeuvres that are both entertaining and useful, basically following the natural patterns a flying dragon uses to mark out its territorial boundaries to other dragons in the vicinity.





This inverted manoeuvre takes some practise. Strong knees are required in order to avoid falling off.

APPENDIX I.

A DRAGONOLOGICAL LABORATORY.

The material that is presented in these appendices, particularly that in respect of parts of dead dragons, is given for information only. More research is needed into this area, but the purpose of the present volume is to help conserve the dragons that remain, not destroy them. This author hopes that a parallel will not be drawn with the numbers of rhinos and tigers killed each year and used in 'medicines' of doubtful value, or for trophies.



DRAGON DUNG.

A remedy for scaring away savage beasts, dung is invaluable in trips to wild regions. Rubbed daily into the face it is a cure for many skin conditions. As an all-purpose fertiliser it has the property of allowing plants to grow in record time. One drawback is that dung from a female dragon on heat sometimes acts as a strong attractor to males.

DRAGON TEETH.

Contrary to the legends of Heracles or Jason, dragon teeth cannot be 'sown' to produce a race of fierce warriors. But this myth may have arisen because the teeth themselves make some of the very sharpest of possible edges to weapons, only recently matched by new steel-smelting technologies.



DRAGON SCALES.

Dissolved in sulphuric acid, and then dissolved again in 100 parts water, dragon scales have been used for centuries as an invisible ink that glows only under the magnetic conditions pertaining at a full moon.

A dragon's claw, while not as hard as diamond, may be used to test the relative hardness of different sorts of minerals.





AMPHITHERE FEATHERS.

The most ticklish of all feathers, these can be made into dusters, or special quills. Additionally, they can be woven together into protective coverings of varying sorts.

DRAGON'S BLOOD.

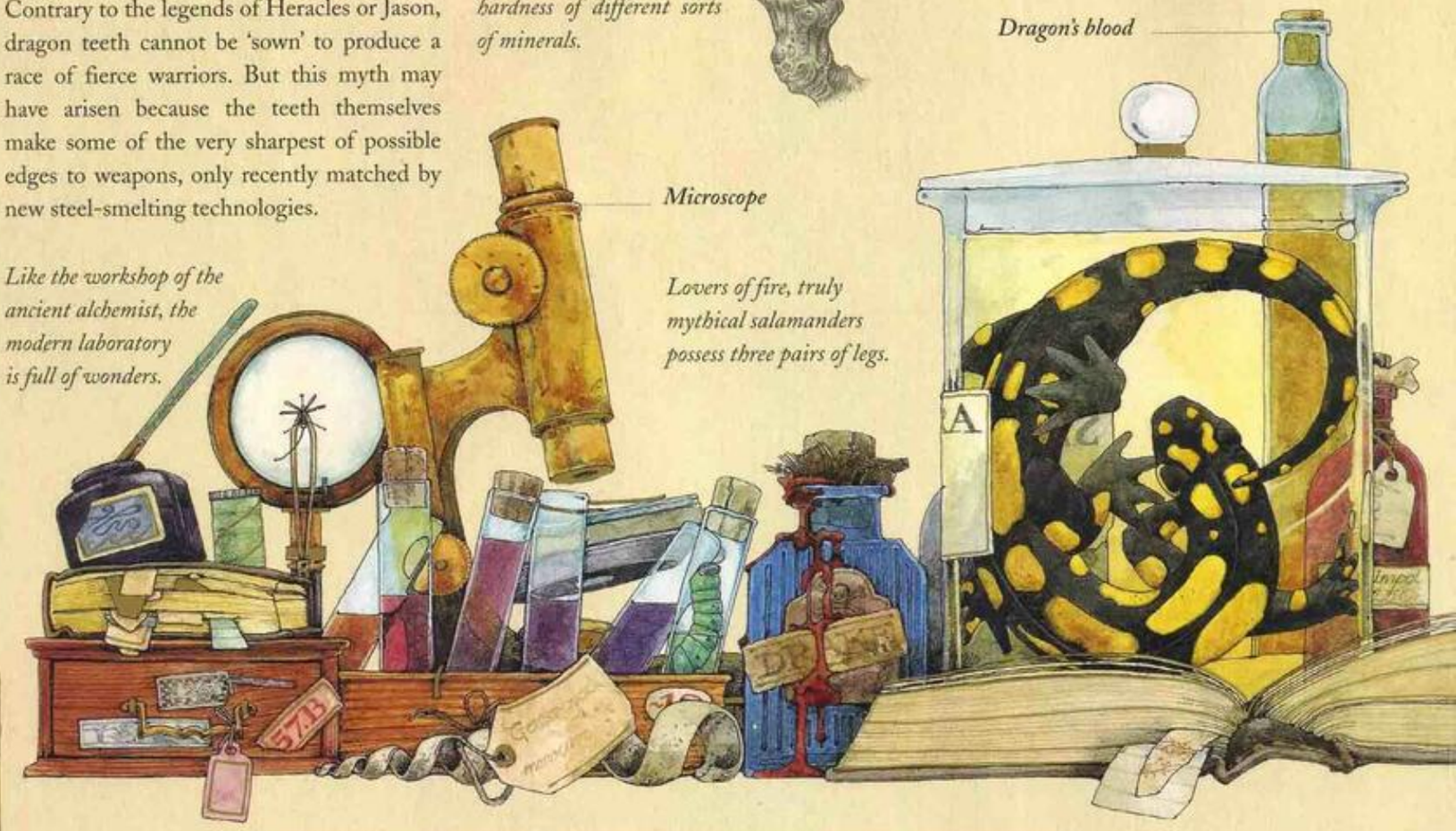
Dragon's blood, while corrosive, can in small doses promote health and regeneration, and can be used to effectively heal most wounds. In larger doses it is dangerous, but can have a potent effect on the brain, particularly on the areas that control language acquisition.

Like the workshop of the ancient alchemist, the modern laboratory is full of wonders.

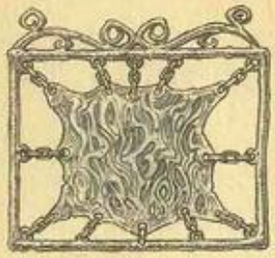
Dragon's blood

Microscope

Lovers of fire, truly mythical salamanders possess three pairs of legs.



To avoid picking up the wrong ingredient, remember to label all your specimens very clearly!



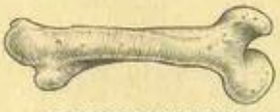
PREPARING DRAGON HIDE.

Cured on an iron-frame, sloughed-off dragon hide loses none of its hardness and can be made into protective shields, hides or costumes. The different sections must be riveted together.



A NEW-FANGLED APPROACH.

One use that has not been tested is using light, strong dragon hide on a framework of bone to mimic the 'gliders' that are all the rage in America and France. One almost fantasises that, with an engine, the contraption might fly!



DRAGON BONES.

Being incredibly strong yet light, dragon bones can be used to make shelters, in much the same way as some eskimos build shelters of whalebone. Alternatively flame-resistant coracles can be constructed to assist in the scientific exploration of volcano craters.



DRAGON HORN.

Perhaps there is no music so deep and sweet as that which is played on a properly hollowed-out dragon horn. In addition, powdered horn mixed with salamander grease acts on the eyes, nose and ears producing temporary 'supersenses'.



DRAGONDUST.

This substance may be collected from the cave walls around the nests of breeding mothers and condenses from their breath. It has a highly soporific effect if mixed with enough dragon blood. Used in quantity, this mixture may even help to pacify fully-grown dragons but under no circumstances should dragondust be ingested by humans.



THE DRAGON'S EYE.

Like the alchemists of old whose highest aim was to seek out the philosopher's stone, capable of transforming base metals into gold, the mystical dragon's eye was sought by dragonologists for centuries. It is the only sure means to determine those dragonologists who, by reason of their innate wisdom and affinities with dragons, may become true dragonmasters. For some reason most likely associated with the dragon's ability to see light across various parts of the spectrum [due to its six optic nerves], a true dragonmaster is reflected with perfect clarity in this precious gem. Fortunately, my own tutor finally succeeded in locating it. It was secreted in a cavern near More Hall in England by Elizabethan dragonologist and natural philosopher, Dr. John Dee, and is often referred to by him as his crystal ball, or 'shew stone'.

Scientific dragonology makes little use of the alembics, athenors or other paraphernalia of yesteryear.



A good pestle and mortar will be found invaluable in the preparation of potions.

APPENDIX II.

USEFUL SPELLS & CHARMS.

Dragons being magical creatures, it is not surprising that there is magic associated with them. Interestingly, it is not understood by scientists why these spells & charms work, and there may be elements in them that are in fact superfluous, such as the 'magic words'. Yet the spells do not work without them. While discouraging scientific dragonologists from magic, we must conclude that 'magic' is simply 'science' that no one understands yet.

THE HONG WEI INVISIBILITY SPELL.

Take four freshwater pearls, ground into a powder with dragon horn and jade. Mix this powder in the grease of a freshly killed, seven-day-old koi and massage liberally all over the clothes and body, repeating over and over as a mantra:

She zheng wang dong · li pa!

蛇正往洞里爬

* * * * *

This spell is found towards the end of the first section of the remarkable Dragon Sutra of Hong Wei. It lasts four hours.

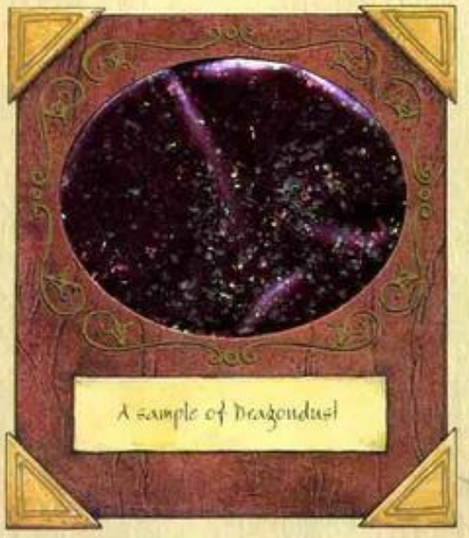
ABRAMELIN'S TAMING SPELL.

Take three troy ounces of dragondust from a silver dish that has been thrice washed in water that has reflected a new moon. Cast it over the dragon, crying:

Ivàhsi yūduin!
Enimôr taym inspelz!
Boyar ugôner gedit!

* * * * *

This spell is hard to get right, because it is very difficult to pronounce the words correctly. It seems likely that they are actually in the secret dragonish tongue. The spell will last for a full three hours.





BEST METHOD OF APPLYING DUST.

Perfect the casting of dragondust using rice or confetti. The best area to practise is at a church with a wedding in progress.

EDMUND GRYPHON'S COOLING SPELL.

Take the tongue of a blind salamander that has lived thirty-one days and a night, ground in a mortar with black alabaster and the clipped mane of a unicorn. Heat all till smoke rises and smear over clothing by moonlight, all the while repeating these powerful words:

ABRA-SALAMANDRA!
ALABASTRUM FRIGIDUM!
UNICORNUCOPIA!

* * * * *

The heat-resistant effect lasts for three days, then wears off gradually.

DR. DEE'S DRAGON-SUMMONATION.

Hollow out the horn of a dragon, take it to the high point of a hill that has a barrow, burial mound or old castle upon it, turn once about and blow three times on the horn before repeating this verse:

Dragon kin that come and go
Come and aid me here below.
Serpents one and serpents all
Come and heed my dragon call!
FLAMMIFAX! ARFAX! ORFAX!
MINIFAX! MAGNIFAX! THORFAX!

* * * * *

For one week dragons will protect you.

Right, the remarkable and swift efficacity of Hong Wei's long-lasting invisibility spell.



START.
Recite the spell.



AFTER 5 SECONDS.
One third of body is invisible.



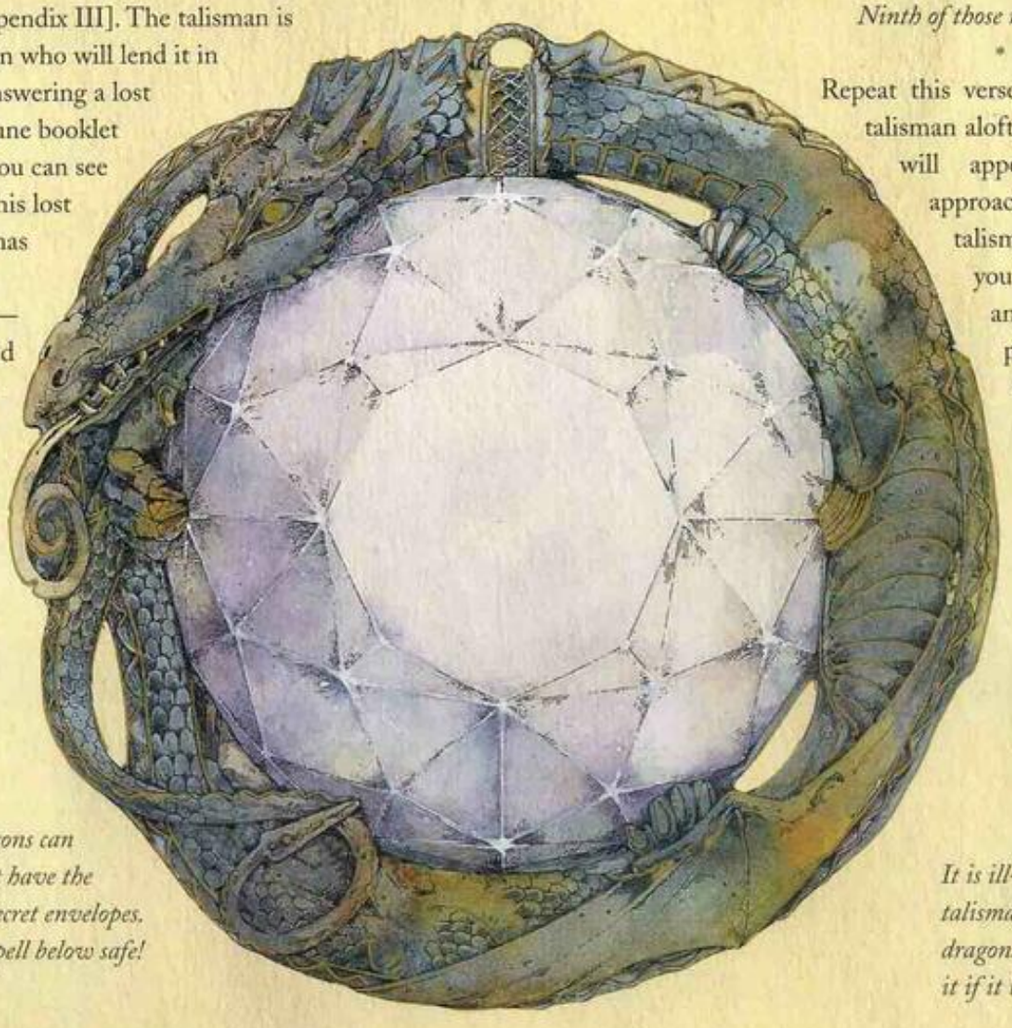
AFTER 10 SECONDS.
One third of body remaining.



AFTER 15 SECONDS.
Whole body is invisible.

THE TALISMAN OF MASTER MERLIN.

As an aside on matters magical, we should refer to the talisman of Master Merlin. The image here is copied from *Ars Draconis*, penned by the monk Gildas Magnus in 1465. According to Magnus, Merlin used it to release the dragons beneath Dinas Emrys [see Appendix III]. The talisman is kept by a dragon who will lend it in exchange for answering a lost riddle. In the rune booklet [Chapter III] you can see a fragment of this lost riddle from Dinas Emrys. What follows are the—probably garbled—words of the talisman spell.



Nine times nine lives hath lived the cat
And ninety nights are nine by ten,
Nine ounces from nine pounds of fat
Nine times hath pecked the Dorking hen,
So nine times nine I'll call to thee,
Ninth of those nine, come thou to me!

* * * * *

Repeat this verse eight times, holding the talisman aloft, and at the ninth a dragon will appear. Bow low as she approaches, offering forth the talisman. When it is accepted you may ask her to perform any one action that lies in her power, and it will be done. She will now become the keeper of the talisman.

The talisman of Master Merlin must be sought with care, and used only once, for good or ill.

While some dragons can read, they do not have the ability to open secret envelopes. Keep the rune-spell below safe!

It is ill-advised to try and keep the talisman, as it properly belongs to dragons who will certainly search for it if it is not used.



WARNING—THE DANGERS.

As with all of these appendices, I make no recommendations that they be tried, as the results are sure to be uncertain and the ingredients hard to obtain. Magic is an attractive study, to be sure, but to a truly modern dragonologist only as attractive as its true [rather than imagined] causes and effects may be studied under the aegis of science. Remember that spells have been known to backfire on those who innocently tried to use them, and should a dragon overcome you while you were trying to use a taming spell, for example, there is no knowing what sort of fun he might then decide to have. It is better to know much, see much, learn much but do little other than the things which may help to conserve and protect the few dragons that remain on Earth.

APPENDIX III.

DRAGONOLOGISTS & DRAGONSLAYERS OF HISTORY.

In any study it is useful to understand a little about those who have gone before. This is partly because, given haughty modern scepticism about dragons, many living dragonologists are very keen to conceal their identities. Indeed, even the best known dragonologists from history preferred to be known first as magicians, explorers or natural philosophers. Dragonslayers, on the other hand, have always seemed to court rather than avoid publicity.



MERLIN AMBROSIUS: Vth Century A.D.

Merlin is considered the founding father of western dragonology. Nennius, the 9th century historian, recounts the story that King Vortigern, retreating into North Wales, tried to build a fortress at Dinas Emrys. However, no sooner were walls set up than they collapsed again. Merlin was able to explain the reason: Two rival dragons—a red Welsh dragon and a white Saxon one—had been imprisoned in a cavern beneath the fortress years before by King Llud. Merlin released the dragons who fought until the red dragon defeated the white one. Vortigern took this to be an omen that he too would defeat the Saxons, as he in fact did.

EDWARD TOPSELL: XVIIth Century A.D.

Topsell, an early English naturalist, included a detailed section on dragons in his scholarly *History of Four-footed Beasts* of 1607. In one note he mentions that dragons are fond of lettuce, but find apples give them stomachaches. The present author has not tested these hypotheses, but can recommend his readers carry a small head of *cos* or *iceberg* in case an opportunity arises.

In Topsell's time, modern science was born when trust in ancient authorities gave way to the current method of testing hypotheses through repeated observations.



MARCO POLO: XIIIth Century A.D.

Marco Polo, an Italian traveller, studied dragons *en route* to China. He writes about elephant-hunting wyverns, two-legged lindworms, and the methods used to launder asbestos [or dragon-proof] clothes in the desert lands of Karakhoja.





GEORGE OF CAPPADOCIA: IIIrd Century A.D.

George of Cappadocia was a dragonslayer who became confused with a Christian saint. This is partly because they shared the same name and partly because, while George of Cappadocia slew an actual dragon, St. George slew the *symbolic* dragon of paganism. The dragon George of Cappadocia slew was not evil, just hungry. The people of Libya, where the dragon lived, had become rich and their large flocks grazed on land that was once the habitat of the dragon's natural prey. So it was not surprising that, having eaten all their sheep, the hungry dragon resorted to feeding on townsfolk. Interestingly, Sylene, the town where this took place seems to have been destroyed as it cannot be found on the map at all, which leads us to wonder if George was *quite* as successful at ridding the area of dragons as history has since painted him.

BEOWULF: VIth Century A.D.

Beowulf, the famous Danish king, was forced to become a dragonslayer when a local dragon was aroused to fury by the theft of a cup from its hoard. Unable to pacify the dragon, Beowulf decided to face it alone in order to save his subjects. Badly bitten and burned he would have failed, had not his faithful servant Wiglaf stabbed the dragon, enabling Beowulf to finally despatch it, although mortally wounded himself.





FU HSI: MMCMLXII B.C.

Fu Hsi is the first recorded dragonologist. A dragon met him in 2962 B.C. on the banks of China's Yellow River, and gave him the vital secret of writing. Fu Hsi used writing to teach people how to become civilised: to use a compass and set-square to take accurate measurements, to make music, to fish and to domesticate animals. It is not known whether modern dragons regret so generously helping mankind in this way.

AFTERWORD.
THE WORK OF A DRAGONOLOGIST.

Be above all prepared. At all times be silent about your work, at all times be secret and subtle. Do not discuss dragons with people who do not believe in them, or those who merely seek to amuse themselves with novelty. Work only with those who share your passion. Learn what you can from all of the other sciences. Cherish all animals. So one day the world may at last learn to accept the honourable science of dragonology.

KNOWLEDGE & IGNORANCE.

When studying dragons remember the dangers, and remember that it is only through increasing your knowledge that you will learn the best ways of studying them. This is particularly true of those who leave their armchairs and go on to become fully-fledged field dragonologists. As someone else may well say one day on a very similar topic, when you visit dragons, take nothing but photographs, leave nothing but your footprints.

AND LAST.

Only a few become master dragonologists. Such are reflected in the mystical dragon's eye. Their task is to conserve and protect those few dragons that remain, for who knows how many shall last another century, with the human population growing at such an exponential rate? And with them, how many more of Earth's creatures will become extinct until people start to say that they never existed at all, except in our imaginations?

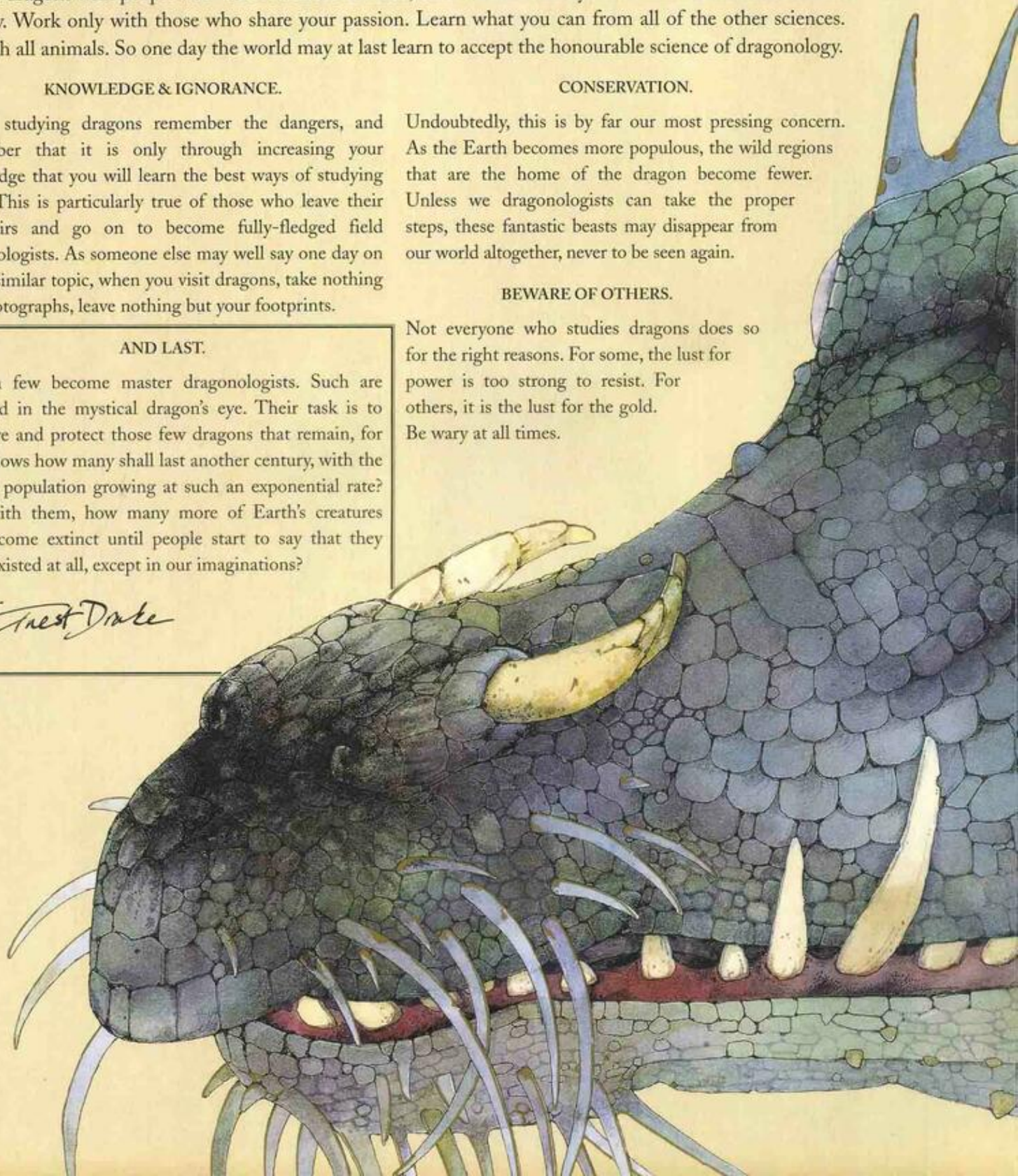
Ernest Drake

CONSERVATION.

Undoubtedly, this is by far our most pressing concern. As the Earth becomes more populous, the wild regions that are the home of the dragon become fewer. Unless we dragonologists can take the proper steps, these fantastic beasts may disappear from our world altogether, never to be seen again.

BEWARE OF OTHERS.

Not everyone who studies dragons does so for the right reasons. For some, the lust for power is too strong to resist. For others, it is the lust for the gold. Be wary at all times.





No doubt but there is none other beeste comparable to the mightie dragon in awesome power and majestie, and few so worthie of the diligent studies of wise men.

—Gildas Magnus, *Ars Draconis*, 1465

