KEEPING PET REPTILES AND AMPHIBIANS

The following pages are extracts from my latest pet care book. 

*Need To Know Exotic Pets* ISBN 9780007262755 published by HarperCollins

Available directly from me here in Perth or through book shops. 

As a book published largely for the US and UK, where a greater variety of herpetofauna may legally be kept, it covers some species not native to Australia but still well worth reading about.

The following pages are small extracts from the book and I have amended some of the information for Australians. The book is aimed at anyone interested in keeping reptiles, amphibians and invertebrates as pets.

In WA it will assist anyone wanting a thorough but practical guide to owning native reptiles and amphibians.

INTRODUCTION
This book offers guidance and practical advice to the reader on choosing a more unusual family pet. A growing range of specialist equipment and well-designed vivariums are available now to assist and encourage the correct maintenance of the most popular species of reptile, amphibian or invertebrates. Whilst many species are easy to maintain there are obvious responsibilities that need to be considered before you purchase one of these animals. For children the adult or guardian must ultimately be responsible for the welfare of the chosen species.

As a responsible herpetologist I have concentrated on those species that meet the following two criteria:
1. That they are suitable to the novice keeper. I have tried to promote the care of the most interesting and easy to keep species, which are not too demanding on time or space.

2. That they are available at pet stores or via specialist breeders and wherever possible from captive bred stock. This ensures that these creatures are free from internal and external parasites and are most likely to adapt successfully to their new home.
Conservation note
Loss of habitat generally for housing or agricultural development along with pollution and other negative human actions are having a colossal impact on the rapidly decreasing numbers of reptiles, amphibians and invertebrates on a global scale. An estimated 1856 species of amphibians alone, that is 32% of known species are “globally threatened” according to IUCN (International Union for the Conservation of Nature).

Captive breeding offers great hope for the continued survival of many creatures. It is hoped that one day these may be reintroduced into the wild if habitats can be saved. Captive breeding also reduces pressure on wild populations, teaches us about their lifecycle and husbandry as well as providing the keeper with healthier livestock. It can with many species also pose a great challenge and it is remarkably satisfying when you watch a snake hatch from an egg or a batch of tadpoles metamorphose into their adult form.

The collection of certain animals from the wild and their trade between countries may rightly or wrongly be illegal. It is important that wherever you live you adhere to both your local and national rules and regulations. Responsible pet ownership and husbandry is the right way to proceed.
Western Australia
In Western Australia you need a licence to keep any reptile or amphibian as a pet and you can only legally keep native species - apart from the Axolotl, or Mexican walking fish as they are often called in Perth.
The licence is easy to apply for but you will be a better pet owner for reading this book in its entirety or completing one of our pet reptile keeping courses.
Once licensed you are also obligated to complete a quarterly return, even if you have no pet but do still have a licence.
You can download the Licence application form, the quarterly return form and the list of reptiles and amphibians that may be kept from the main Reptile Keeping in WA page.

I agree generally with the system currently in place but think that the entire licensing system is overdue for review and in essence should encourage the care, maintenance and breeding of native pets without cost, licensing or reporting restrictions. There is obviously some intent in this direction as Category 1 species of which currently no animals are listed will eventually be able to be kept without a licence.

It is, after all, only by having contact with nature and natural systems that we understand them and learn to appreciate our natural world. This should teach us to value it and ultimately to seek its protection.

Myself and many others think that the keeping of native animals is the most sensible way forward to aid both conservation and preservation of our native Australian species.
I like to think of a more enlightened future when the keeping of native animals including mammals and reptiles will be considered the norm and our reliance on non native and detrimental companion animals such as cats a thing of the past.

Hopefully before too many more species become extinct in the wild the government departments may be encouraged to agree and allow the public to fully embrace native animals as they have native plants into our gardens, homes and ultimately into our hearts.
THE VIVARIUM

People have been keeping more unusual pets for centuries. Many make for surprisingly interesting and easy to keep companions. With patience and care it is possible if desired to both enjoy and breed some of these wonderful creatures. In the home a vivarium can be a beautiful and enchanting miniature habitat that both you and your pet can enjoy.

CHOOSING YOUR PET

First steps

Read all about the animals and their care and then decide on a species that will suit you and your circumstances best. Consider the accommodation, equipment, feeding and handling requirements.

Where to obtain stock

Joining a Reptile club or herpetological society is an excellent way to obtain stock, find breeders and to get up-to-date information and opinions on suitable species. Ask family or friends, you will be surprised how someone always seems to know someone who has an interest in these pets. The internet is an incredible source for information with many thousands of web sites devoted to reptiles, amphibians and invertebrates. There are also various reptile magazines published in most countries full of adverts and of course a library will have lots of other books on the subject. Even if your local pet store doesn’t stock reptiles they will probably who does.
Handling
Many of the featured species are amongst the most handleable of all herptiles and people can get great pleasure from this close contact with nature. However, some species are enjoyed aesthetically and once in the vivarium they are only handled when removed for cleaning.

When handling pets, check the environment is safe, do you need to close the door or windows if it takes flight or hops way. Keep other pets or potential predators such as cats away. Minimize the danger of a fall by sitting at a table or on the floor. Remember that your pet is not a toy and handling by children should always be closely supervised by an adult. Juvenile animals should only be handled occasionally and for short periods until they become tame or conditioned enough to sit still and not to rush off. Feeding your pet after a handling session is a good way to condition it to accepting human contact as a positive stimulus.

Do not handle animals after they have eaten or when they are about to moult or slough. If transporting your pet, it must be comfortable and kept at a temperature and humidity level that will cause it no suffering.
AMPHIBIANS
The mucus-covered skin of many amphibians protects them from bacterial infections and it is often best to handle them with wet hands. However do not be put off handling them, my own Australian tree frogs have during educational talks been handled by many people several days a week for several years with no ill effect to man or frog.

LIZARDS
The dry skin and docility of the featured lizards make them ideal candidates for more intimate contact – they are amongst the most handleable species in this book. However, they should never be lifted by the tail – their ability to ‘drop’ them is well known.

SNAKES
Small snakes are easily supported in the hand. Most will wrap around your fingers or wrist to feel comfortable. Never dangle them from the neck or tail, but support them along the length of their body. Heavier species should be held firmly and their weight supported.

INVERTEBRATES
Many invertebrates are delicate and need careful handling. Do not disturb them if they are moulting. Caution is advised when handling at all times because most species have tiny hook-like claws that easily get tangled up with clothing or may snag a small child’s skin. If in doubt, do not handle. Currently in WA you are not it would seem able keep these simple to care for creatures as pets.
Benefits of Keeping a Vivarium Pet

1. You are unlikely to be allergic to an animal that has no fur or feathers.
2. Reptiles, amphibians and invertebrates may be kept in locations that prohibit the care of other species, for example, a unit with no garden.
3. They are generally silent and do not require regular walks, annual veterinary inoculations or grooming.
4. Most species are easily maintained, requiring at most only a 10 minute feed each day and a cleaning regime that only takes an hour or so each week.
5. Most species are content to live in their vivarium. Species such as pythons prefer small, secure accommodation – larger units may cause them stress.
6. Although a relationship may be established, your vivarium pet, unlike a dog, is not going to become emotionally dependent on you. They will not feel lonely if you are out of the house during the day and many can be left for a weekend without additional care.
7. These creatures can help nurture an interest in the world of natural history, conservation and hopefully a respect for all living things.
HOUSING YOUR PET

To create the right environment for your pet you must have an understanding of the types of accommodation and equipment that are available. The correct choice of these items is essential and should ensure that your pet enjoys a long and healthy life.

THE VIVARIUM
A vivarium or aquarium can be a beautiful and enchanting miniature habitat which both you and your pet can enjoy. Many purpose built vivaria are available making it easy for the keeper to select a secure unit and create the ideal condition for the care of animals. I generally encourage larger vivaria for most pets – it allows you to keep more individuals together and even to establish a community set up. There is a range of suitable vivarium options.

HERPTILES AND THERMOREGULATION
A temperature gradient is essential for the successful maintenance of most herptiles. They thermoregulate, or move between different temperature zones, to warm up or cool down as required. You must provide these different environmental conditions within the vivarium.
LIGHTING AND HEATING is vitally important and covered in detail in the book. In the vivarium, you must try to offer the correct conditions for your pet to thrive in, and this means providing suitable artificial heat and light. Spotlights are very useful for general lighting and provide hot basking spots, essential for thermoregulation. When ‘night’ falls after 12-16 hours of ‘daytime’, the temperature of a vivarium may drop quite significantly without the additional aid of a heater pad.

Do not place your vivarium near a window to provide extra sunshine for your pet. The useful ultraviolet rays will not penetrate glass or other barriers and may well turn your vivarium into an oven with direct sunlight lifting the temperature to a fatally high level.

EQUIPMENT
Your choice of pet will dictate what equipment you require to create the right environment. Every animal in this book may be housed successfully using a selection of equipment described in full in the book but should include some of the following in most cases. The correct positioning and choice is immensely important so please read the book for full details or at least read a book on the subject to get it right.

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Books are a great source of information – visit your library and local book shop. Many animal societies produce specialist publications and scientific papers giving more in depth information on a particular species.
SUBSTRATES see book for expanded information.
A large variety of substrates are available and your choice will depend on the needs of the pet and your aesthetic preference. For ease of maintenance, many breeders and herpetologists keep lizards and snakes in very bare, laboratory style setups with little more than newspaper as a base. This may not affect the happiness of the animal at all, but I prefer more naturalistic displays incorporating a mixture of substrates and furnishings.

Below are listed some of the more popular options, but as long as the substrate is clean and free from the introduction of pests, parasites or toxins, many natural items found in your locality – twigs, leaves, stones and gravel-can be utilised.
COMPRESED PAPER CAT LITTER PELLETS
PLAY SAND AND PEBBLES
WOOD OR BARK CHIPS
SHREDDED ASPEN
LEAF LITTER
REPTILE GRASS

FOODS AND FEEDING more detail again in the book.
All living creatures require foods to grow and thrive. Some are specialists, and eat only one type of food. Herbivores, for example, are animals that eat only plants and fruits. Some animals are less specific and will eat a variety of foodstuffs – other animals, insects, plants and fruits – and are known as omnivores. Animals that feed only on insects are known as insectivores and those that feed on other animals are classed as carnivores.

You will need to determine which group your pet belongs to and then offer it the right selection of foodstuffs, in sufficient quantity and quality, to satisfy its needs. Whatever the diet, the food should supply that species’ requirements in terms of fats, proteins, carbohydrates, vitamins and minerals. You also need to take into account that feeding can be an important behavioural stimulus. Many insect-eating herptiles, for example, spend much of their life hunting for and catching food. Getting the feeding right for each animal is all part of successful pet management.
HERBIVORES
Many birds, mammals and invertebrates are herbivores, as are most tortoises and some lizards. Many species, however, do supplement their diets with protein when available. Some is unintentionally consumed with plant matter, some intentionally sought.

There is a wide variety of fruit and vegetables that can be shop bought, or grown in a pesticide free garden or allotment, that will suit herbivores. Amongst the most suitable are lettuce, broccoli, tomato, pear, apple, seasonal berries such as raspberries and blackberries, dandelion flowers and leaves, spinach, carrot, cooked potato, cabbage, grasses and non-poisonous tree leaves, flowers and seeds.

A variety of complete foods are also available and that are balanced meals that have added vitamins and minerals. Personally I believe that you can do no better than provide your pet with a range of fresh foodstuffs. For convenience, however, they are handy and not subject to seasonal availability like fresh produce. These ready meals are particularly useful if a friend or relative is caring for your pet in your absence.

OMNIVORES
Creatures that feed on plants and other animal species are considered to be omnivores – this category includes humans. Omnivores covered in this book, such as the Bearded Dragon, Blue-tongued Skink and Veiled Chameleon, will be satisfied with a combination of the foods listed under the herbivore, insectivore and carnivore sections.

Individual preferences vary but Blue-tongued Skinks, for example, are generally partial to snails offered in their shells; an adult specimen will probably enjoy two or three snails and a quarter of a banana at one sitting. Insects are full of protein and few lizards will pass up the opportunity to eat these nutritious titbits, even those species considered herbivorous.
INSECTIVORES
Due to interest in keeping and breeding herptiles, the range, quality and availability of live foods has increased greatly over the last few years. Insectivores, and most omnivores, will enjoy a selection from the following live foods, listed in order of size.
Crickets, Mealworms, Waxworm, Fruit Flies

OTHER FOODS
The following additional foods are also suitable for both insectivores and omnivores.

COLLECTING YOUR OWN
Commonly farmed live foods should be raised in hygienic conditions. One of the problems of collecting your own, for example snails, worms, spiders, is that you always run the risk of introducing some parasite or unwanted guest. Having said this, one of the benefits of using wild caught live foods is that they are packed with naturally acquired vitamins and minerals.

Make sure that the creatures you collect are not dangerous to humans or pets. Choose wild-caught prey with caution and avoid collecting in areas where pesticides or fertilisers are used. Most gardeners will happily allow you to collect snails and other ‘pests’ from their garden.

CARNIVORES
Carnivore is a term largely used to describe flesh-eating animals. Within this book, the only true carnivores are snakes. For most of their lives snakes in captivity will accept dead, thawed out, rodents, and are known as ‘defrost feeders’. The rodents may be purchased ready frozen. For humane and legal reasons, your pets should not be fed live vertebrate food. Snakes consume their food whole, so there is no mess or leftovers and it would seem that their vitamin and mineral requirements are met totally by their small rodent diet. Supplements are therefore not generally needed, although you may add vitamin drops to the snake’s water occasionally.
SUPPLEMENTS
A range of products are now available for herptiles. The most important ones for many species contain added vitamins and minerals. Some new products even claim to provide the UVA and UVB requirements of basking species in a liquid form. The best advice I can give is to use all products in moderation and at the recommended dose.

FEEDING TIPS
Some people prefer to feed their pet in a separate container to the one in which it lives. Plastic pet homes are ideal and can also be used to keep your live foods. With this method it may be easier to monitor how much is eaten by each pet. It may also train your pet to accept being handled first before receiving its food reward in its feeding box. It is important to keep and breed your live foods in hygienic and humane conditions. Care instructions should be available from your supplier or pet centre.

HEALTH AND PREVENTATIVE CARE

Most health problems can be prevented, since the major cause of herptile ill health is poor husbandry or injury caused by you or another animal. By providing the correct environment, hygienically maintained, with the right quantity and quality of foods most problems can be easily prevented.

I recommend that the novice purchases captive-bred specimens whenever possible. Unfortunately in Western Australia breeders cannot yet produce enough stock to satisfy demand and the costs related to collecting or buying breeding stock tends to deter or penalise those hobbyists keen to breed reptiles in captivity.

Health and preventative care issues are covered in more detail in the book.