COST OF LIVING CRISIS AND REPTILES

A statement about the UK's 'cost of living' crisis and the reptile hobby, and how husbandry can possibly be affected

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DISCLAIMER

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The details provided in this document are based on sole professional and personal use, and the document contains both scientific information as well as personal opinion. Other people may have different results. Different items of the same model number may differ due to their manufacturing batch or operating conditions.

This document may refer to the overall exotic animal keeping hobby as the “reptile hobby”, but this is a force of habit – I do in fact mean the keeping of the broader herpetological spectrum, including invertebrates, amphibians, and even birds.

This document does not constitute financial advice.

TERMINOLOGY USED

As with many things, there may be more than one correct or colloquial way to describe the same item. There may also be common terms used that may not be correct in everyday usage. I've tried to remain consistent throughout the document so that if I refer to a specific piece of equipment or technology, you as the reader will know with confidence which part I'm referring to. I'm only human though, and there may be mistakes.

UVI

This is shorthand for Ultra Violet Index. UVI is a standardised measurement for the appropriate wavelengths of radiation associated with essential biological processes involving the synthesis of VitaminD3. This document does not aim to educate about this biological process specifically, and further reading is readily available online. By continuing, it is presumed that you have an understanding of UVI. UVI is not to be confused with UVB.

WATT(S)

A Watt is the unit of electrical power equal to one ampere under the pressure of one volt. For this document, you only need to understand that a Watt is a unit of power, and electrical devices have their energy used described in Watts. By continuing, it is presumed that you have an understanding of Watts.

KWH

The shorthand ‘kWh’ is short for “kilowatt hour”. OVO Energy describes this very well as a measure of how much energy you’re using. Despite the name, it doesn’t mean the number of kilowatts you’re using per hour. It’s a unit of measurement. 1 kilowatt hour is the amount of energy you’d use if you kept a 1,000 Watt appliance running for an hour. By continuing, it is presumed that you have an understanding of kWh.

SUPPLIER

For this document, the term Supplier refers to your energy company. This is the company that sends you a bill and you pay for your gas and or electricity usage.

PAINTING THE SCENE

THE UK'S STATE OF AFFAIRS

Energy prices are at an all-time high in the UK. Earlier in 2022 the energy regulator allowed a price-cap on energy to be raised by over 40%, with the price cap being set at 28p per kWh. All of the energy companies then raised their prices to the new cap. The regulator has confirmed a further raising of the price-cap will go ahead in October 2022. This will see prices increase even further, with an increase of over 60% expected.

There are rumours of a third increase to the cap due in February 2023, with a further increase of another 40% according to some sources.

At the time of writing this document, the UK is currently undergoing a political change. Events in government over the last few years have caused somewhat of a political turmoil for the acting government. The main representative of the country, the Prime Minister, has offered his

resignation and two new candidates from the same political party are bidding for the job of becoming the new Prime Minister.

The political scene means that much of the media attention is focused on the candidates for Prime Minister, and not on the energy price increases. And it also means that nothing much in terms of policy is being set in stone by the current government about the cost of living crisis, because the government is set to change in the coming weeks which could reverse all promises.

To add to the problem, inflation has increased further and the Bank of England has suggested that the country may be entering a recession.

All of these things mean that the price of basic things like food, energy, and clothes are going up.

It's a difficult time for a lot of the UK. And as over 50% of households in the UK have some kind of pet (www.pdsa.org.uk), this means it's also a difficult time for pets.

MY POSITION

I am from a part of the UK that is on the list of the highest child poverty in the country (www.gov.uk), and I see poverty daily. As a part of my job consulting on animal lighting and husbandry, I meet many people who are already skipping meals in order to ensure that their families and pets are looked after.

I recently met a family with some bearded dragons. Both parents worked full time, and as I was measuring the UVI in the enclosure a van arrived from a food bank charity. It was dropping food off for them for the week. They looked very embarrassed by the situation and apologised – but I made sure to tell them that I did not judge them. They are partly the inspiration for writing up this document.

I am not here to make money from this document.

PROPOSALS FROM INDUSTRY

ARCADIA REPTILE & SNAKES 'N' ADDERS

At some point in August 2022 Arcadia Reptile - the product manufacturer and brand - paired up with a popular exotic shop called Snakes 'N' Adders, based in Sheffield UK. They released a quasi-statement in the form of a 58 second campaign video about the cost of living crisis and reptiles.

In the video, the statement explains that animals are being surrendered to rescue centres due to an increase in basic costs. The video then goes on to compare the cost of keeping a reptile to other basic luxuries such as watching television or boiling a kettle.

The video makes a claim that keeping a leopard gecko should cost about 14.5p per day, vs. watching a television which could cost 21p per day. The video explains usage amounts and wattages in greater detail than this.

The video means well, and it aims to make keepers stop and think about the *real* costs of keeping reptiles. But I fear that it doesn't

appeal well to people already on the poverty line who don't have a television because they sold it in order to be able to afford a school uniform for their child.

OTHER REPTILE BRANDS AND STORES

Pets at Home, a large brand in the UK, has recorded sales increases of 6% in the first quarter of 2022 (www.thisismoney.co.uk). The brand has not released any public statements about this that I could find.

At this point in time I've not seen any statements from any other brands or stores.

ENERGY SUPPLIER HELP

The energy suppliers are, unfortunately, not offering any help to pet keepers. They have made no statements regarding pet keepers.

Water companies do have items available to help reduce the cost of water. More detail is provided in a later section.

ANIMAL CHARITIES AND REPTILE RESCUE CENTRES

The RSPCA released a statement in April 2022 stating that they've seen increased traffic regarding financial support for animal keepers.

In August 2022, Cheshire Reptile Rescue released some very crude calculations - with very few caveats - on the cost of keeping reptiles. The statement alluded to the fact that cooking food in a microwave or oven is more expensive than lighting a reptile when measured on a daily basis. Again, this message means well, but it seems to imply that families should stop cooking their food if they're going to stay above the poverty line. This message doesn't appeal to anyone already

hovering on the poverty line, the sort of people that are already skipping meals.

The National Centre for Reptile Welfare, a charity I support, has not released a statement as far as I can see.

There is, however, anecdotal evidence that rescue centres are facing more and more surrendered animals – and of course these centres are themselves also having to pay higher costs to remain active.

THE 'COMPARING PRICES' APPROACH

Both the Arcadia/Snakes 'N' Adders statement and the Cheshire Reptile Rescue statement went down a similar train of thought. They both approached the cost of living crisis from the angle of comparing the cost of keeping a reptile to the cost of other luxuries, with the aim being to prove how inexpensive a reptile is comparatively.

But by doing this they have done nothing more than confirm that the cost of *all* luxuries is expensive when compared to previous years. The Arcadia video states that boiling a kettle can cost 44.8p per day (8 boils at 5.6p per boil). The Cheshire Reptile Rescue statement also makes a claim at 5.6p per boil, with 6 cups of tea a day costing 33.6p.

The mathematics used to get to this figure is that an average kettle is 3kW and that an average kettle takes 4 minutes to boil water.

They use this as a comparison on the basis that *5.6p isn't a lot* – and they'd be right that 5.6p isn't a lot on its own. However this doesn't put into perspective the 40% increase to bills. If we compare this to 12 months ago (without the 40% increase), the cost would have been only around 3.3p per boil (~20.2p for 6 cups of tea).

To someone on the poverty line, the difference between 20.2p and 33.6p per day is the difference between affording a tin of beans (37p

beans from Aldi – a price which itself has also increased from 32p only 12 months ago) at the end of the week and feeding oneself.

Because of this, it feels unfair to use the excuse of comparing prices to other luxuries. It completely ignores the fact that prices have increased by 40% and trivialises the increased costs as *only* 33.6p to boil a kettle a few times a day.

I'm sure that everyone involved didn't mean to, but comparing costs seems to come across as unintentionally insensitive to people who can't afford the new, more expensive, price of 33.6p per day on cups of tea – because they were already on the verge of struggling when the cost was 20.2p. And it also does nothing to help the real issue of increased costs or help with saving money. Cheshire Reptile Rescue offers no money saving methods in their statement.

CAVEAT ON COMMENTS MADE

I want to be clear about the comments made in this section. I respect all of the companies mentioned, and I know that they mean well. I feel that their resources are probably valuable to a lot of people. And most of all, I commend them for trying to make a difference. This is not an attempt to slander anyone.

WHAT CAN BE DONE?

PRACTICAL CHANGES

Most keepers can make some very small but significant changes to how they keep their animals. Some changes could save a lot of money.

Outdoor Keeping

At the time of writing, we are in summer. In this time, significant amounts of animals can be kept outdoors - even in a small terrace house with a small garden. For example, the most common tortoises I personally see in captivity are all Mediterranean species. Such animals can thrive in a safe outdoor enclosure. If your animal is outdoors, then you don't need to spend money heating and lighting their indoor enclosure.

Celtic Reptile & Amphibian (https://celticra.uk/) are a UK based reptile breeder that specialises in outdoor keeping. Their primary focus is on

UK and European species, but much of their practical skills can be transferred over to species such as garter snakes, tortoises, and turtles – at least for the summer months.

And there is no reason that, if in a safe enclosure, a leopard gecko couldn't be outside on a warm summer day in the UK. Although care should always be taken to ensure animals don't *overheat*, even in the UK – a very real threat!

Hibernation/Brumation

Many species, including bearded dragons, tegus, leopard geckos, and many tortoise and turtle species can cool down for winter safely and enter a form of brumation.

This slowing down of the metabolism is actually a natural part of the annual metabolic cycle for a lot of species. By allowing a reptile to hibernate we allow for the body to rest naturally – this gives time for the organs to heal and for a slowdown in growth (accelerated growth being one of the major factors in MBD, especially in tortoises and turtles).

Not only are we essentially enhancing our husbandry by brumating reptiles, but we're also cutting out the cost of heating an enclosure, lighting an enclosure, and feeding an animal for a few months – the months which we'd otherwise be using *more* money on energy to heat the home, buying Christmas presents, etc.

The major citation here is that an animal should only be brumated if it is a species that naturally would do so, and if it is fit and able.

Natural Feeding

Some of the most commonly kept reptiles - bearded dragons, blue tongue skinks, and tortoises – can be fed most if not all of their diet for free.

By picking safe-to-feed plants outdoors, a keeper will eliminate the need to purchase plants from the supermarket.

Supermarket greens are highly nutritious for humans, but sometimes *too* nutritious for reptiles. In the wild, many herbivorous animals thrive on a low nutrient-rich and high fibre diet.

Wild plants can be the perfect food source. They aren't filled with fertilisers to artificially boost their nutrient content, and they are readily available – even on a Friday evening when you've just got home from work and need to feed Timmy the Tortoise!

A good, free, resource for checking toxicity of plants is The Tortoise Table website (www.thetortoisetable.org.uk), there is also an app. This is a large database of common plants along with details of their suitability as food for tortoises – but this also generally extends over to other plant eaters.

Feed Less

One huge problem we face in the UK is an obesity problem. That is, obesity of our pets. Many pets in the UK are overfed. I myself am guilty of this – and who can blame someone for wanting to interact with their reptile and watch them really enjoy their food?

But ultimately, feeding every day is probably not essential for most species. Even every other day may be too much. For many snakes, once every 2 months is plenty.

Feeding more than necessary can put real strain on the liver and kidneys of our animals, just as it does in humans. Excess fat is just as bad for a reptile as it is for a human. In fact, some reptiles show signs of endothermy with and without so-called 'brown fat', which is a thesis in itself.

By cutting down on feeds, we may be able to reduce the amount of overweight reptiles and also make our animals healthier. And in doing so, we can cut down on the cost of feeding otherwise increasingly expensive foods such as feeder insects, meat, eggs, rodents, and fruit.

Care should of course always be taken to ensure nutritional needs of an animal are always met.

Reduce Daytime Hours

As a total energy-saving measure, and with no real biological benefit, lights can be turned on later and turned off earlier. This can mean reducing the time that your heat lamps, UV lamps, and LEDs are turned on.

By reducing the daylight time by just 1 hour (half an hour in the morning and half an hour in the evening), a keeper could reduce the cost of keeping animals in small but significant amounts.

A keeper could even use this as a way of really enhancing husbandry and creating a more natural setup. Lights could be "staggered" on at the start of the day, and equally "staggered off" at night. This could simulate a sunrise and sunset.

This may not be the best way of saving money for someone with just a single reptile. But if there is more than one enclosure, then this method could help to save some money.

You should always make sure that you provide appropriate lighting – including the correct UVI.

Drop the Wattage

Many people will purchase a “heat lamp” without really thinking about it. But not all lamps are created equally.

Some of the “Intense” incandescent lamps, with a “narrow reflector” shape (brands such as Exo Terra, Reptile Systems, and Zoo Med have them) are, by design, stronger in output compared to some equivalent Wattage lamps.

If a user normally buys a 100W Floodspot lamp from ProRep, then a 75W Exo Terra Intense Basking Spot lamp may be able to meet the same requirements.

Equally, Arcadia’s video claims that instead of using a 100W Solar Basking Spotlight, keepers can swap out for a 75W Arcadia Halogen Heat Lamp to get the same results.

Also, not using extra heating items such as heat mats will reduce energy usage.

Care should always be taken to ensure that the needs of an animal are being met when making changes to an enclosure in any way.

Basic Insulation

If you have an animal that needs to stay awake during the winter, or needs to be kept warm at night, then you may be able to insulate their enclosure to increase the efficiency of any heating elements.

Something as simple as old bedsheets over an enclosure can help to insulate it (be sure to leave space for ventilation, and enough space from the heating elements that bedsheets don’t catch on fire). Or spare sheets of plywood can be used on the outside of glass enclosures as a good insulator.

By insulating in this way, you could reduce the amount of supplemental heat that you need to provide at night.

Breeding Feeder Insects

There are many guides online on how to breed your own feeder insects. I find great success with dubia cockroaches – although they do require supplemental heat to breed properly.

Mealworms, superworms, and crickets can call breed in room temperatures. And these species can survive on grass that you would find outside (pesticide free).

By breeding your own insects, you can save money long term on having to buy new insects on a regular basis.

Not only can this save money, but by feeding insects with weeds and grass you can create higher quality food for your reptiles. This is a term called gutloading and is beneficial to our animals.

SEEKING HELP

The UK government, local authorities, and even some water suppliers have schemes available to help with saving money or reducing costs. Equally, there are charities that are able to offer services to anyone in need to true financial assistance.

This section provides pointers to places where you may be able to seek help or advice from professionals.

Saving Water

Most water suppliers in the UK offer free items to help save water and reduce costs. These can include toilet cistern gels, water saving shower heads, and other items.

You can search the internet with the name of your provider and the phrase "save water kit".

Or you can head to www.savewatersavemoney.co.uk, enter your postcode, and sign up for a free kit that way if you're eligible.

You may also be eligible for reduced water bills if you are on certain benefits. More information is available at https://www.ccwater.org.uk/households/help-with-my-bills/.

Money Saving Expert (MSE)

It pains me to say this, but the Money Saving Expert Website has a good list of money saving tips for the cost of living crisis.

The website makes significant money via commission or referral programmes – if you use any link on MSE then the website pays MSE for your click. To me, this feels unjust.

That said, some of the tips on this page are quite useful: https://www.moneysavingexpert.com/family/cost-of-living-survival-kit/

Benefit Checker

You can use an independent, free, and anonymous benefits calculator to check what you could be entitled to. This will give you an estimate

of the benefits you could get and how much your benefit payments could be:

https://www.gov.uk/benefits-calculators

If you prefer to speak to someone in person, you can find a local adviser using the AdviceLocal system, provided by the charity RightsNet:

https://advicelocal.uk/find-an-adviser

National Debt Line

If times are tough, it may be in your interest to speak to a professional service that can talk you through your money problems. There is nothing wrong with asking for help.

https://www.gov.uk/national-debtline

StepChange

StepChange is a UK charity aimed at helping people in financial crisis.

https://www.stepchange.org/

Trust Grants

Many suppliers have dedicated government-backed grants. You may be eligible if you check the list on the Citizens Advice website.

https://www.citizensadvice.org.uk/consumer/energy/energy-supply/get-help-paying-your-bills/grants-and-benefits-to-help-you-pay-your-energy-bills/#Grants_To_Help_Pay_Energy_Debts

REFERENCES AND FURTHER READING

PET POPULATIONS IN UK

https://www.pdsa.org.uk/what-we-do/pdsa-animal-wellbeing-report/uk-pet-populations-of-dogs-cats-and-rabbits

CHILD POVERTY DATA

https://www.gov.uk/government/statistics/children-in-low-income-families-local-area-statistics-2014-to-2020/children-in-low-income-families-local-area-statistics-fye-2015-to-fye-2020

PETS AT HOME SALES INCREASE DATA

https://www.thisismoney.co.uk/money/markets/article-11084037/Pets-Home-shakes-cost-living-crisis-sales-rise.html

BROWN FAT IN SEA TURTLES

https://www.jstor.org/stable/1445737?seq=1#page_scan_tab_contents

ENDOTHERMY IN TEGUS

https://www.science.org/doi/10.1126/sciadv.1500951

ARCADIA REPTILE LIGHTING GUIDE

https://www.arcadiareptile.com/lighting/guide/

ARCADIA/SNAKES 'N' ADDERS VIDEO

https://www.facebook.com/arcadiareptile/videos/474635370666869

CHESHIRE REPTILE RESCUE STATEMENT

https://bit.ly/3Q4DfZF

Screenshot taken 7 August 2022:

Cheshire Reptile Rescue
6 August at 00:07 ·

Some basic math based on current energy prices as a lot of people think reptiles are pushing up there bills more then they actually are..

Based on assumption of £0.28 per unit (KWH)

So a beardie which is one of the higher energy usages.

Heat bulb 150w on a high range dimmer stat and a 39w proT5 unit (these are what we provide as standard on our set ups) and is what we would recommend for a dragon set up from any supplier.

So again working on the assumption of a 12 hour cycle average everyday.

39w x 12 = 468w (0.468kw)
150w x 12 = 1800w (1.800kw)

Total 2248w (2.248kw)

This is also based on assumption of everything been on maximum for the 12 hours, your thermostat will reduce this based on ambient temps and your house heating etc.

So worst case is 2.248kwh multiplied by £0.28 kwh so £0.6294 per day or 63p to run the set up on full heat and light per day.

Now let's compare that to a few other house hold items

Kettle average 3000w (based on what I can find) takes an average of 4 mins to boil so 3000÷60×4=200w per boil or 5.60p per boil average of 6 boils a day is 33.6p just for your cuppas.

The scary one if you have an electric shower average is 10.5kw (10500w).
10500÷60=175w per minute or 4.9p per minute average shower is say 6 mins per person and they will round off so 30p per person per day per shower average house 4 people so potentially £1.20 a day just for your showers.

Doesn't stop there
Microwave average 1200w
Electric oven average 5000w
Average washing machine 1200-3000w
Average dish washer 1500w
Kids games consoles are 300w plus on most modern consoles and a gaming PC can be triple that.
Even most modern phones are charging at 45w plus an hour.

So please when worrying about the electric it isn't just the animals using it our normal day to day activities uses a hell of a lot of power. Also with people now having electric cars, fans and air con due to heat these also use huge amounts of electric.

60 15 comments 7 shares