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On the Difficulties of finding rare Chelonians in China, with some Notes on the Natural Habitat of *Cuora yunnanensis*

Introduction

Everybody who ever tried to find chelonians in the wild, for example in the south of Europe, will have learnt that these animals do not just run around everywhere so that you stumble over them. Tortoises (*Testudo*) are still relatively common in the right places and seeing dozens of turtles (*Emys* and *Mauremys*) basking on the edge of a water body is still a possibility in the year 2018, though, in spite of the rapid advancement of the destruction of their habitats. After the collection of these animals as food and for keeping them as pets has by now been curbed by strict laws in Europe and North America the destruction of their habitats has remained the greatest threat to their continued existence. The removal of specimens from the wild is still an all too common occurrence, however, often by people who are still unaware of existing legislation, but their not knowing does not protect them from punishment either.

In China, chelonians have been exploited for medicinal and culinary purposes for centuries. They were nevertheless still rather common in wild situations until into the early and middle of the 20th century. Some species were traditionally particularly sought after and have always been pursued and collected to a greater extent than others. An outstanding example for this are the species of the genus *Cuora* in general and the Chinese Three-striped Box Turtle (*Cuora trifasciata*) in particular. However, it also affects many other, previously common species that are now difficult to find in the Chinese wild, and the rising prices in the (mostly illegal) chelonian trade in China itself is a clear indication of how rare this “merchandise” (e.g., *Platysternon* and *Sacalia*) has become. Not even once-common species such as, e.g., *Mauremys reevesi* or *Pelodiscus* spp. are readily traced in the wild any longer, and if you are lucky enough to achieve this feat chances will be that they are escapees from some or



Fig. 1.
The “Turtle Tower”, the new centerpiece of Mr. Li’s turtle farm in Guangdong Prov., China – the biggest *Cuora trifasciata*-farm of the world.



Fig. 2.
Cuora yunnanensis from the breeding project of Prof. Rao.

other source or specimens that were released on purpose in Buddhist ceremonies.

One may now be tempted to raise the moralistic forefinger and demand that the Chinese put a stop to the collection of chelonians from the wild and follow the example of the Western World. But here many friends of Nature and chelonians tend to overlook the fact that the trade in wild-caught European Pond Turtles (*Emys orbicularis*) – as food – used to be very much alive in Germany until a hundred years ago and continued until only about fifty years in Spain, for example... There is/was only one species of European Pond Turtle and it has become all but extinct in Central Europe, and today, great efforts are undertaken to re-establish it with founder stock from conservation breeding projects in the last remaining suitable habitats. The second half of the 20th century also saw thousands and thousands of specimens of the genus *Testudo* being shipped from Southern to Central Europe as pets, bringing these species right to the brink of extinction. Now, after decades of being legally protected, their populations have begun to recover quite nicely and they do no longer have to suffer from collection – today they threatened by the loss of their habitats instead, in particular due to the expansion of tourism.

Even though various native and alien chelonian species are produced in their millions at Chinese turtle farms the pressure on the last remaining wild populations remains immen-

se. The health-conscious Chinese consumers regard wild-caught specimens as more effective, as their Qi, the life energy, is claimed to be stronger by the traditional Chinese Medicine (TCM), and not least, a much more expensive wild-caught turtle on the plate is by all means something that will underscore the status of its consumer. The large turtle farms, which are particularly concentrated in southern China, also still buy up wild-caught specimens to reinforce or replace their breeding stock. Yet there are indeed serious attempts to severely curb the trade in wild-caught native chelonians or even stop it completely. Over the past few years, the central government of China has clearly stepped up checks at pet and food markets, resulting, of example, in the famous Qing Ping Market in Guangzhou, Guangdong Province, being closed on occasion of the Olympics in 2008. Gone are the times when wild-caught turtles could be openly traded by the crate- or bagful in China and all over Southeast Asia. Even the large-scale turtle farmers are under pressure and have to fear for their businesses, for there are serious plans to outlaw the trade in farm-produced, protected native species like *Cuora trifasciata* or at least tighten up controls.

For its part, Chinese market places have been shifting to the Internet, in particular when it comes to chelonians as pets. Here, colour morphs of indigenous and exotic species are currently trending, and North and Cen-

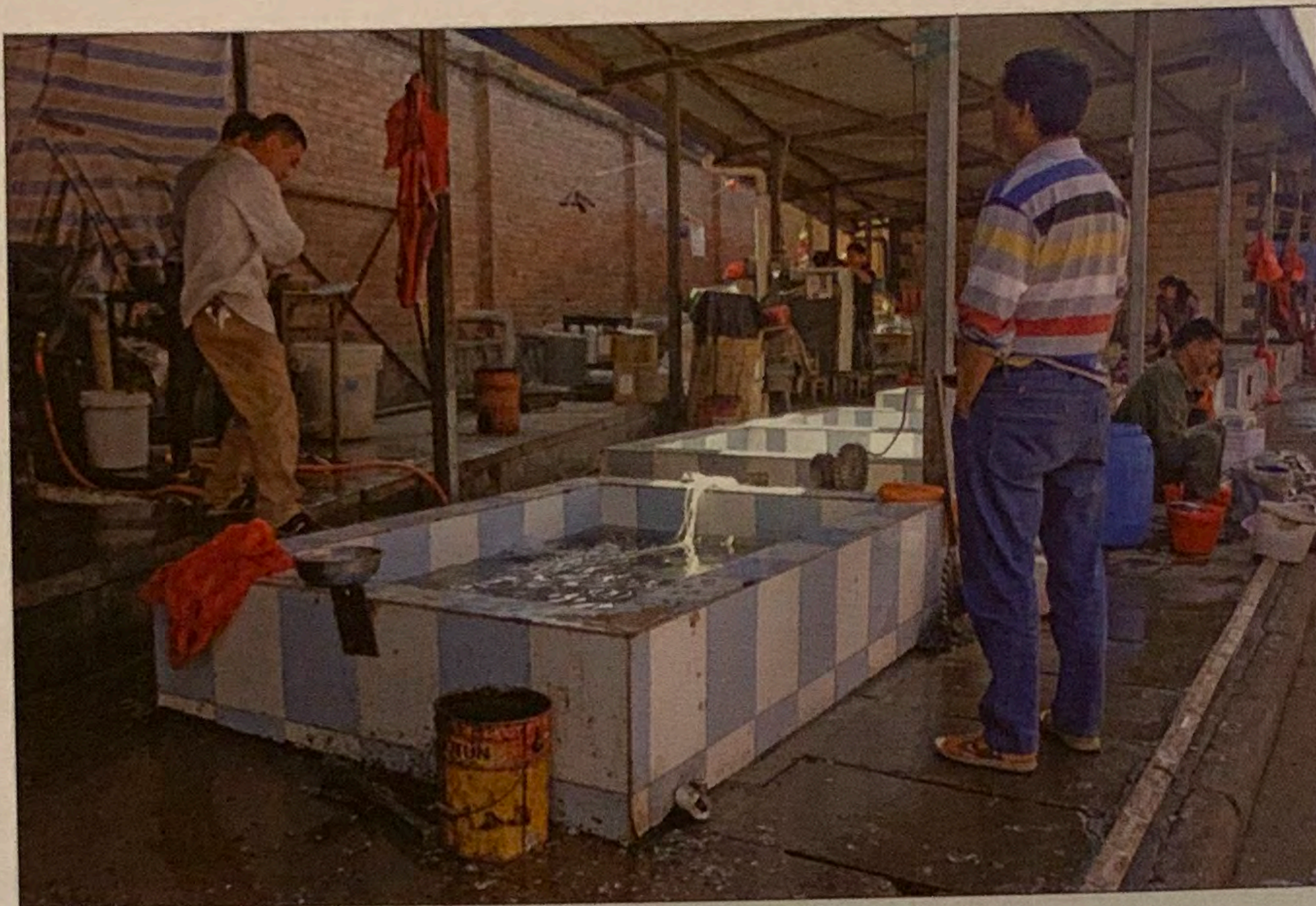


Fig. 3. Market in a small town in central-Yunnan; in former times here in the „fish section“ one could find local turtles sometimes.

tral American species such as *Terrapene mexicana*, *Terrapene nelsoni*, and *Terrapene carolina* are very popular at present. Every now and then, however, sales lists will also include very rare native species like the Yunnan Box Turtle (*Cuora yunnanensis*).

Years of continued effort and research have enabled the second author to establish a far-reaching network of contacts with private keepers and breeders as well as farmers of turtles. This made it possible to monitor at least some of the trade in very rare species and draw conclusions regarding their status in the wild. It also revealed that the rare species of *Cuora* are successfully propagated in China, even if the number of young produced thus is far too insignificant compared to the extent in which specimens are still removed from the wild. These numbers could certainly be increased, as European breeders have demonstrated that it actually takes only a few basic considerations to successfully propagate all species of *Cuora*; the International Centre for Turtle Protection in the Allwetterzoo Münster in Germany is an outstanding example in this conjunction.

This is not meant to imply that the Chinese would not know how to propagate box turtles, and species such as *Cuora trifasciata*, *Cuora cyclornata*, *Cuora aurocapitata*, and *Cuora mc-cordi* are in fact produced in substantial numbers by now. Breeders are slow to accept, however, that these animals are highly susceptible to stress, and keeping specimens indivi-

dually, which would be essential in our view for most species of *Cuora*, is practised only rarely. At least many large-scale farmers insist that breeding *Cuora trifasciata* also works if they are kept in colonies. However, they fail to mention that this regularly causes them to lose many specimens, and males in particular. Many farmers therefore try to curb these losses by keeping the animals in murky water, treat them with pharmaceuticals, or accommodate them in overcrowded conditions, which seems to break the territorial disposition of the animals, but they seem to ignore the fact that the numbers of productive females and clutches could be raised if only they kept these turtles one by one. They are clearly deterred by the much increased space requirements such a setup would mean. Their traditional perception of keeping turtles still remains a fenced-in pond populated with numerous turtles, ducks and fish.

Species that have always been much rarer and could be obtained only in small numbers even by private Chinese keepers were thus often cared for to death in this manner in the past; this applies in particular to *Cuora zhoui* and *Cuora yunnanensis*. Because these species demand very stiff prices in China, they are offered and traded in great secrecy, often through direct contacts to a few local suppliers that will make these animals available to large-scale, wealthy farmers in the south of China.



Fig. 4.
Today only farm
breed turtles as
these Red-eared
Sliders are on
sale.



Fig. 5.
Mauremys reevesi
at a market in
south Sichuan.



Fig. 6.
Pelodiscus spec.
at a market in
south Sichuan.



Fig. 7.
Romantic view to
the Fuxian-lake.



Fig. 8.
The dirty water
of the lake.



Fig. 9.
Near these rice
paddies a *C.*
yunnanensis was
found and re-
portedly released
nearby in a public
park some years
ago.

The Yunnan Box Turtle

Cuora yunnanensis was originally described by BOULENGER in 1906, based on a handful of specimens from Kunming and Dongchuan, Yunnan, China. After it could no longer be found since the 1940's, the species was eventually declared extinct by the IUCN in 1999. It therefore came as great surprise when photographs of a female from Kunming appeared on the Internet in 2004, which the second author was able to identify as *C. yunnanensis*. This specimen was subsequently acquired by the acquainted Chinese turtle expert ZHOU Ting. A year later, a male specimen became available in the same manner and breeding was successful a short while later. In 2006, Prof. RAO Ding

Qi from the University of Kunming was able to acquire another female in Kunming, but for a long time it remained a mystery where exactly all these specimens had come from. It took until 2008 when an expedition headed by RAO Ding Qi eventually discovered a population that was persisting to the northeast of Kunming. Because the demand for this species is enormous both in China and internationally we will do without publicising the exact locality in an effort to not further the "collecting tourism" in Yunnan. The members of the newly discovered population were collected in their entirety anyway and have since been living in a secured installation at the University of Kunming overseen by Prof. RAO Ding Qi.



Fig. 10. In this transformed landscape in Central-Yunnan, no one found a turtle for two generations.



Fig. 11. The edge of the newly discovered region where only a few years ago locals found *C. yunnanensis*; intensive agriculture, damming projects and road works are the obvious threads to the nature here.



Fig. 12.
Many factories
and industrial fa-
cilities are present
in the lowland
nearby.



Fig. 13.
The adventurous
road into the core
area of this newly
discovered but
maybe extinct
population of
the Yunnan box
turtle.

No new specimens have since been reported from this area, implying that this species has become extinct there. Prof. RAO is the singular person in China in possession of a permit to catch, keep and propagate this species for scientific purposes. After there had been hope that this species could be propagated *in situ* and thus save it from extinction for a while after the discovery, calm has since settled on this project. There were some hatchlings, but their number is probably too small relative to the number of adult wild-caught specimens kept. In the meantime, a variety of locals and foreign visitors engaged in searching for this species. The exact locality was never published and all scientists and assistants knowing

it were sworn to complete secrecy. Nevertheless it is said that some Chinese came to know where to look for these turtles and ran into trouble with local authorities. Meanwhile the species is in the same appendix of the Chinese red list as the panda. Searches were of course extended to other areas of Yunnan and in adjacent provinces, both by means of officially authorized expeditions and “fortune hunters” of the kind mentioned above. And indeed, individual specimens surfaced in the informal trade every now and then over the past years, but it has remained impossible to find out where these originated. There were also several instances of *Cuora yunnanensis* having been found outside of the “new” locality, for exam-

ple, in the shape of one specimen from a small town south of Kunming. This specimen even came to fame in the local press. Whether it was an escapee from a captive setup or had indeed been washed down from the surrounding hills could never be clarified, though. The former option appears more likely from our perspective, but this will be discussed later on. A trapper then caught another, male specimen in a trap, but it unfortunately died in the process. No further finds from this area have since become known even though they have likely occurred. As has been mentioned before, information like this is of extreme value to traders and keepers in China and it is for exactly this reason why no exact locality data will be revealed,

not even amongst friends. It is interesting that males are extremely scarce and therefore come with astronomical price tags.

Our search

Stimulated by several discussions with Chinese and American colleagues we decided to visit the Chinese provinces of Sichuan and Yunnan in May 2017. The aim was to find out more information on distribution and natural history of the local turtles. We heard of anecdotal reports on turtle species from there that no one considered to exist in this area. Allegedly some people found *Geoemyda spengleri* and *Platysternon megacephalum* there in the wild. We also expected *Mauremys reevesi* and *Pelodiscus si-*



Fig. 14.
Secondary mixed forests with *Rhododendron* und *Azalea*; the turtle stream in the center of the picture.



Fig. 15.
Rhododendron.

nensis. The taxonomic status of the latter in the area of north Yunnan and south Sichuan is not clear yet. Big-headed turtles are known only from south Yunnan until now. We did not expect to find any *Cuora flavomarginata* or even *Cuora yunnanensis*. However, in spite of being in possession of general research permits and having good affiliations to several universities we did not plan to visit the area where *C. yunnanensis* had last been found by Prof. RAO. Therefore we would have needed a special permit. Our search began in Kunming where we landed at 11 °C after a flight of only two hours from 32-°C Guangzhou. We were fortunate enough to have native Chinese-speakers on our team. This is an absolute necessity for any activity in China, and it starts when you have to buy bus tickets. Using exactly this means of transport we tried to leave the city, noting rather quickly that the settlements outside of the large cities do not at all compare to those we were used to in Europe. Almost everything here is “bigger and more”, with towns and settlements growing together ever more closely at a rapid pace. The landscape is highly fragmented as a result, and both the plains and hills are used for agriculture far into really steep situations or destroyed from mining. The large lakes around Kunming, including the famous Lake Dian, are so polluted today that they will hardly sustain ducks or robust edible fish any longer. At least the small tributaries to Lake Dian used to form part of the natural habitat of *Cuora yunnanensis* in earlier times, i.e., at the time of the original description of this species. Our first destination was a smaller town, where we first went to scour the local live-animal markets. Aside from various farmed fish and fruit and vegetables, nothing was to be had here, no turtles and no information on local turtles either. With wild animals having become scarce almost everywhere in China, it is a timesaving strategy to always search the local markets first. If information or even live specimens can be obtained there, then it may be worthwhile taking a closer look at the natural habitats in the surroundings, preferably under the guidance of a local trader or even hunter. This plan will often fail in the case of more valuable natural produce, though, because the market traders are very hesitant to

reveal their suppliers for fear of competition. However, experience has shown that it is worth to keep at it, because somebody will certainly know something. We eventually arrived at the small town, a village by Chinese standards, and managed to locate the discoverer of the Yunnan Box Turtle that had made it to the press. This specimen had been found in a rice paddy on the outskirts of the settlement in 2010. Mister YU reported that no comparable turtles had since been found there, at least not since he had first moved here. At the time, he had handed his specimen over to the local authorities, which were said to have released it in a “nature park” on the lake. We spent the afternoon cruising the adjacent rice paddies, but failed to spot even the least signs of turtles or even suitable habitats. At least from the area where RAO had rediscovered his turtles it was known that this species would live in flowing waters at rather low altitudes.

On site, we met two taxi drivers who would later turn out to be very resourceful and without whom we would certainly have not gathered so many pieces of information as we did in the end. Here it may be sensible to mention that the typically Asian habit of using “friendly nods” during any type of communication may be rather counterproductive to both parties at least on journeys organised in Central European fashion. It may in fact result in your taxi taking you on a tour of the town because its driver does not know how to reach your destination or (as has happened to the senior author) cannot read the business card of your hotel. The planning of the duration of a trip or a visit to a protected area may also be thwarted thus, because “politeness” dictated that the driver keep quiet about the fact that the road into the mountains was impassable or required a permit that he did not have. That this is so will then often become evident only from the facial expressions of other locals after several hours of strenuous travelling. These problems did not present themselves in the case of our two taxi drivers, though. We agreed on moderate fares, and their motivation to take aliens through the province was high, especially as it entailed several stays in more simple hotels. A brief discussion with the family of the drivers was all that was needed to come to an agreement.



Fig. 16.
Lower stretch of
the stream in the
C. yunnanensis
area.



Fig. 17.
Farming leads to
sediment and pes-
ticide depositions
into the water.



Fig. 18.
Upper section
of the stream,
the very spot
where a local girl
observed a turtle
with the descrip-
tion of a *C.*
yunnanensis only
two years ago.



Fig. 19.
A quite natural section of the stream, but also here human impact is evident by grazing of goats and water buffalos.



Fig. 20.
Section with deeper water level and a lot of submerge vegetation; according to Prof. Rao such areas are the preferred spots of *C. yunnanensis* in his research area.



Fig. 21.
Detail of the stream with its muddy bottom.

On the road, our drivers proved able, asking locals for directions in spite of their using cell phone navigation, and conveying us to all the destinations we desired to reach in a timesaving manner and in spite of partially difficult road conditions that took quite a bit out of both the drivers and their machinery. They even tried to extract information on the presence of turtles by phoning up various friends and acquaintances who lived in the areas that we wanted to visit. Our next stop was in an area in the midst of a chain of hills that we had found looking quite promising on Google. Here, very small, industry-free villages inhabited by minor ethnicities still existed amidst agricultural fields and small remnants of forests. However, it soon

turned out that no turtles had been living here for at least two generations. There were hardly any flowing watercourses either. One of the older villagers ventured that that he knew of wild turtles, but these would live where he had relations in a place at least three hours by car through difficult terrain. We decided to not follow up on his vague descriptions, especially as we had the impression that he only wanted to do us a favour by inventing turtles that did not really exist – it is a typical trait of Chinese to not say, “Sorry, but I don’t know”, but rather to save face by coming up with a white lie that will sound as plausible as possible. Also, the Google maps we had brought along suggested the area to have incompatible vegetation cover and water bo-



Fig. 22. Mussels point to the sandy and muddy ground of this stream and quite clean water.



Fig. 23. Poplar plantation and at the same time buffalo pasture near the edge of the stream.

dies. Good maps are practically impossible to obtain in China, off limits to foreigners and ordinary people, and for exclusive use by authorities and the managers of conservation areas. Google can be used only to a very limited extent in China for which reason we had downloaded our maps and also carried them with us as backup printouts. Normal communication was possible, though, using an Internet Hot Spot and Chinese SIM cards. Foreigners may not acquire SIM cards everywhere, for which reason a visitor is well advised to purchase one with adequate airtime in a tourist centre like Shanghai or Guangzhou, because funding it later will often prove impossible in a neighbouring province where other providers may have local monopolies. Other than that it looks as though every Chinese by now owns at least one cell phone, and network coverage is surprisingly good even if telecommunication is kept transparent to the authorities.

Our next aim was the most Southern part of Sichuan from where we got information on natural found *Geoemyda spengleri*. Despite extensive preparations by email and telephone we were not able to meet these informants. Interviews with the local people did not result in any reliable hints on the occurrence of such a species of turtle. Taking into consideration that turtles in China are transported for trade over long distances and into remote areas we suspect the putative wild caught *G. spengleri* (or maybe even juvenile *Cuora mouhotii*) came from a market as imports from south China. In a small town in south Sichuan we finally got interesting information on broad headed *Mauremys reevesi*. From time to time the dealers here sell these although we did not see any at the time of our visit. This turtle also known as *Mauremys megalocephala* usually occurs in the lower Jangtse area in the provinces of Anhui and Zhejiang. Some scientists treat it as morphological variety rather than a full species. Here the dealers told us it came from the area South of Chengdu. As we did not see any of these and do not know if the locality reported is true we can not tell for sure it is a local Sichuan species. We decided then to drive south again to central Yunnan. During our drive south, we stopped at a temple that offered a picturesque view across Lake

Fuxian, but the ponds in the temple grounds held only neozoans: Bull Frogs (*Lithobates catesbeianus*), a Red-eared Slider (*Trachemys scripta elegans*), and the tadpoles of toads. The small stream feeding these ponds was relatively clean and contained a surprisingly large population of shrimp.

The following stopover of our foray was a town in which we wanted to meet up with local people, more precisely representatives of local minorities. Friends of our taxi drivers had let us know that this town was now home to a group of "Miao" that had been relocated from their small village of simple dwellings to a high-rise complex. China at present pursues a policy of dissolving rural villages resettling their inhabitants in newly developed towns. The Miao are an officially recognised minority that has until now been living in a comparatively original manner, practising small-parcel agriculture and still gathering and hunting various forest products. As a result, they have a reputation of knowing their natural environment particularly well. After interviewing older people in the town centre for some time we eventually happened upon an old lady in traditional dress. Following her advice soon we came to a complex of highrises in the middle of the large town. The courtyard between the twenty-storey buildings was where a few old men sat together. We introduced ourselves in all form and soon found confirmation that they were of the Miao and thus exactly whom we had sought. Their village did unfortunately no longer exist after it had been demolished and replaced with a new megafactory. But they knew turtles! Until only some fifty years ago, a species of turtle used to live in the watercourses all around their village, and its description matched *Cuora yunnanensis* very well indeed. Without having been shown pictures of it, they described its colour pattern and the typical ventral hinge. When we broke out the pictures of different species, they immediately recognised *C. yunnanensis* beyond any doubt. The old dignitaries went on to tell us that when they had been moved, they had collected the last specimens and taken them along to the city in order to sell them. By now, we were surrounded by an ever-growing number of Miao, but none of these could provide information on



Fig. 24.
Neophytes in the
stream: *Eichhornia*.



Fig. 25.
*Amphiesma
modesta*.

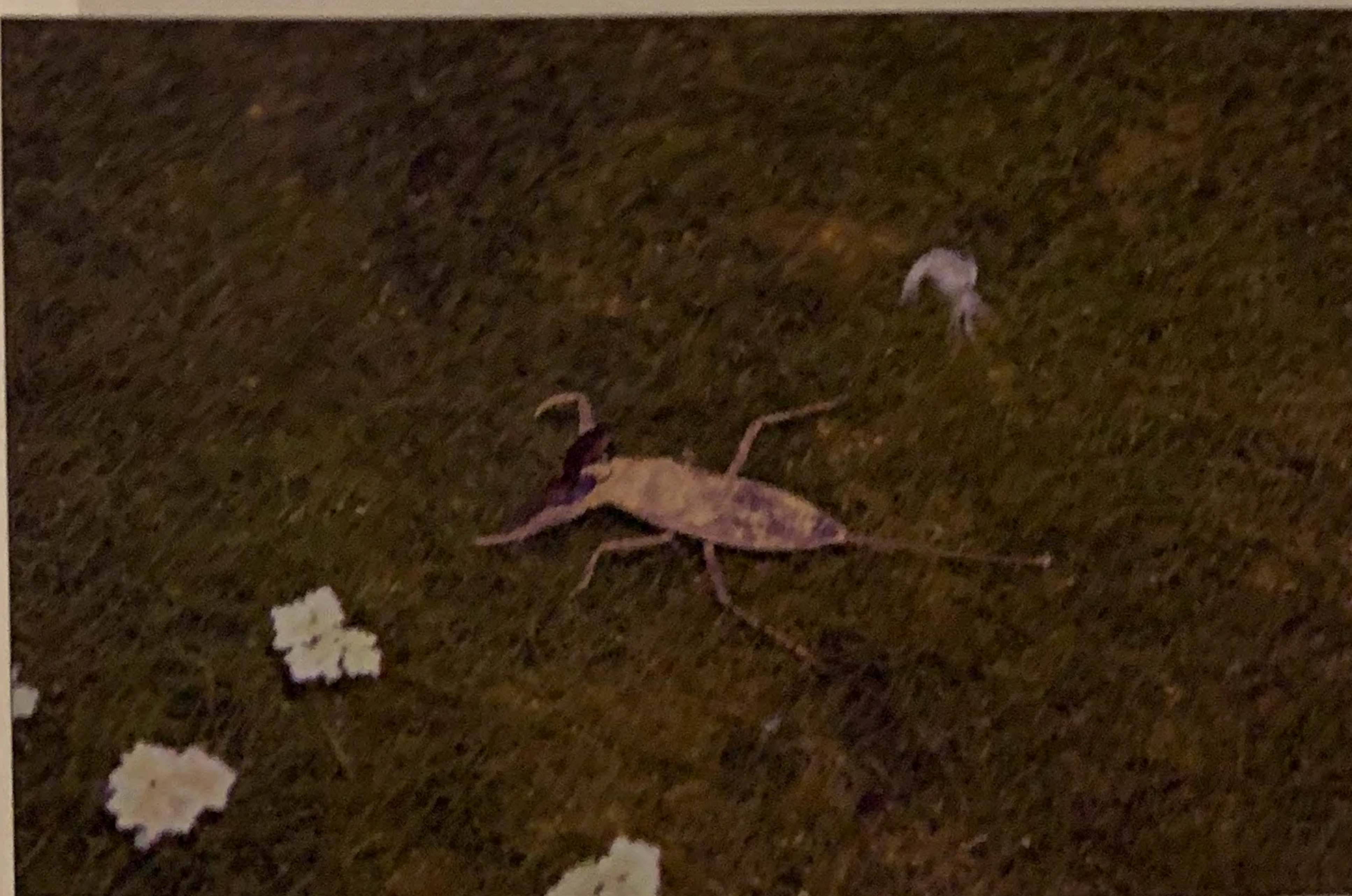


Fig. 26.
Water bug with
its prey, a tadpole
(*Odorrana
schmackeri*).

more recent sightings. It was interesting, however, that these people knew another turtle from their original territory, probably a species of *Pseudemys*. This now were the first concrete pieces of information on the Yunnan Box Turtle and the first indications of another, as yet unknown occurrence, even if this species was very likely to have become extinct there as well. We asked also about the Big-headed turtle but no one knew this characteristic species there.

Scouring the markets of smaller settlements, we encountered wild animals, usually birds such as pheasant, partridge, owls, starlings and nightingale over and again, but turtles were limited to Red-eared Sliders (*Trachemys scripta elegans*) and Common Snapping Turtles (*Chelydra*

serpentina) on one occasion, all of which originated from turtle farms. A few traders recalled native “hard turtles” and one species of softshell from the old days, but these had not been seen in the market for many years. It was another indication of even once-common species having become locally extinct as a result of overexploitation and the destruction of their habitats.

The natural habitat

On our way to an area that had looked promising on our maps and was situated near the former Miao village, we again passed almost exclusively through anthropogenically altered landscapes, past settlements that were fusing ever more solidly, agriculture that was spilling right



Fig. 27.
Turtle enclosure
in a village near
Kunming.



Fig. 28.
Again a *T. scripta elegans*; according to the owner definitely from the local stream behind the village.

over the low hills, and a multitude of small industrial plants. Even secondary forests were becoming a rare sight. While searching for a hotel for the night in a small town, our taxi drivers made the acquaintance of a young man who availed himself, against a little compensation, to take a day off his work in a garage and guide us to his house in the mountains. Here, so he reported, he had seen turtles in the stream running right past his house for the last time some six years prior. His description again seemed to indicate that these had been *Cuora yunnanensis*, and following the obligatory social tea and some palaver we decided that it could be worth our while to take him up on his offer. Under his guidance we spent several hours driving on dirt roads, climbing into the mountains through a landscape that reminded us of Mediterranean bushland, consisting of low coniferous and deciduous trees (including, amongst others, evergreen oak trees) and various rhododendron species. Tall "long-noses" (the Chinese concept of Europeans) in the company of three Chinese arriving in a minority homeland – when the younger siblings of our guide spotted us as we approached his home they ran off as fast as they could for they had never before seen Westerners in real life. After some hesitation and continued reassurances by her brother, one of his sisters eventually confided to us that she had seen one such turtle as recently as two years back when she was working in the fields near the stream. The people here also knew only this species as

became evident when they were shown pictures of Red-eared Sliders and the like and did not show any signs of recognition. The stream was 2–5 m wide in this area, and very murky from sediment and apparently the wastewater that was added by another stream to its lower course. It ran at a very low incline and sported a bed of sand mixed with gravel, often also of mud from washed-in sediment in the shape of the characteristic reddish brown soil that is very rich in iron. Farther upstream, near the house of our guide, the water was clear though and lushly vegetated with aquatic plants where the current was calm. There were, however, also relatively expansive carpets of algae that suggested that nitrogen was introduced to some extent. Wherever the lay of the land allowed it, even tiny patches were utilized for agriculture right along the banks of the stream and on more gently angled slopes. Villages deserving of this term were absent, but we encountered individual dwellings perching on the slopes every now and again. We searched the stream down a length of several kilometers. The stream hosted a multitude of mussels (Unionidae, Corbiculidae), snails, small fish and shrimp, as well as somewhat larger crayfish. Furthermore, we came across two species of frogs (*Odorrana schmackeri*, *Rana chensinensis*), one of toads (*Bufo gargarizans*), skinks (*Lygosoma* sp.), and even a snake (*Amphiesma modesta*). Air temperatures were rather pleasant at 25–28 °C during these days of May, and the water in the stream had

already warmed to 18 °C. A few days earlier, the weather had been much cooler, as was mentioned above, at a mere 11°C in air temperature, which constituted a rare cold spell for the season. We learnt that even though the place was situated at about 1,700 m a.s.l., winters with frost were hardly known in this region. The local residents farther down the stream also told us that they had seen turtles, but this had likewise happened several years ago. All of them impressed on us that the turtles would not be pursued actively here, but were picked up, if at all, only when one stumbled over one. They would then typically be made a present to a relative living in the city, often in Kunming, which gave us an idea of where the first specimens that had surfaced in the early 2000' might have originated. Unfortunately it remained questionable whether turtles still persisted in this stream, because, like almost everywhere in Yunnan, farming in the surroundings had been switched to more profitable tobacco over the last years. This was new to the second author who had visited Yunnan a decade earlier and noted that rice was widely farmed where tobacco plants could now be seen growing all around. Tobacco farming goes along with a heavy deployment of pesticides and because it is practised right along the stream it may be expected that it has negative effects on the local fauna...

We used the last two days to visit more small towns and indeed obtained more information on the occurrence of turtles. On a small market, we happened upon a lady who claimed she owned a native turtle. After paying her the equivalent of € 5 she was prepared to leave her vegetable stall for a short while to go and fetch the dried specimen from her home: unfortunately it turned out to be yet another Red-eared Slider. A similar incident unfolded on our way back to the provincial capital when, motivated by a small payment, a lady could be convinced to show us the live turtle she was keeping as a pet in an earthenware trough in her courtyard. Even though this specimen was said to have been taken from a stream nearby, it likewise was a Red-eared Slider. Considering that it is not too uncommon for turtles being kept as pets in this part of China and that a few farmed species are offered for sale as pets

or food in the markets, chances are that the one or other exotic will be encountered in the wild as well. Even though neither Red-ears nor Snappers are stream-dwellers, they may still manage to survive in the slow-current sections of moderately large streams and small rivers and in ponds and dams.

Conclusions

We did not find any indication of a population of *Platysternon megacephalum* in central or north Yunnan. *Cuora yunnanensis* appears to be or have been the only turtle species living in streams in the surroundings of Kunming. Larger flowing and stagnant waters are instead presumably home to *Pelodiscus*. *C. yunnanensis* very likely feeds on a variety of molluscs, crustaceans and plants, including fruits (species of fig, amongst others). Its habitats vanish dramatically fast due to human interference. If locals encounter turtles in the wild they will collect them as food or for selling them on, but this practice is much less widespread in Yunnan than in the neighbouring provinces. Even though we were unable to see a single specimen, dead or alive, the interviews we conducted clearly suggest to us that we have discovered an as yet unknown occurrence of *C. yunnanensis*, some 100 km from the last locality that became known. Although it is difficult, we try to obtain research permits for a future survey with Chinese colleagues in this area to proof our hypothesis.

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