

Saturday, 11.4.09

There are nice tasks to do and not so nice tasks and yesterday and today we did one of each. The nice task would be this evening to go to Fairy Walk again to catch another 26 still healthy Mountain Chicken for the second shipment to get them into the relative safety of captivity. Yesterday, the daytime therefore was spent going through a big batch of post mortems that accumulated over the past weeks. Since we collect any dead Mountain Chicken we come across in the field and mostly freeze them for later processing, they have to be eventually post mortemed and various samples taken. So Gerardo and I spend the majority of yesterday in our apartment, the windows wide open, hoping we would not get any surprise visitors as they would not have stayed long... the stench was something to get used to. Depending on the quality of the carcasses different samples were taken, labelled and fixed and the remains bagged for incineration.

Today then was another gathering of a large crowd of helpers from the Forestry and Veterinary Departments and we set off for the long trek to Fairy Walk for the second rescue capture.

Newly arrived from Jersey two days ago, I had got a first insight into the Montserratian Mountain Chicken habitats the previous day in a couple of transects where the chytrid fungus has already severely affected the populations and only seven frogs were seen, encountered far apart, some of them visibly sick.

Visiting today the last healthy population at Fairy Walk was an eye opener for me. Even after working with a large number of these frogs in captivity on a daily basis and since over seven years did not prepare me adequately for the scenery. Descending down into the steep, wooded canyon after a long trek and hearing the immense chorus of those so familiar sounds echoing around you is just eerie. And although being used to see those gigantic frogs close up, they just look most impressive when seeing them sitting here and there on the forest floor in prime condition. What got me most, though, is the knowledge that this scenery was common to see in all the woodlands around until just a few months ago where it is now deadly quiet.



With the expert knowledge of the Forestry staff we quickly got hold of the required amount of males and females and the very healthy looking frogs were labelled and individually bagged and again transported back to the cars hanging from long poles.

At the temporary housing facility, they again got their first antifungal treatment baths and were then left alone until tomorrow when we would treat them again, take morphometric measurements and mark them with PIT-tags, small ID chips. They would only have to stay for a couple of days here in their provisional quarters before heading off to Europe to complement the first exported group for a large enough safety population.

Tuesday, 14.4.09

Today was another big step forward in rescuing this species. The second shipment was to be sent out; this time 26 frogs were going to Parken Zoo in Sweden who are collaborating with us in this effort together with the zoos in London and Chester in the UK.

Parken Zoo are already holding a few young Mountain Chicken bred in Jersey and just recently took on another 22 of our juveniles at very short notice so we could free space and convert our holding facility into a biosecure quarantine room used for the first shipment out of Montserrat one week ago.

This second huge effort by Parken Zoo to free up even more space to temporarily hold the 26 frogs shipped out today is vital to the whole rescue operation. Without it, we could not have taken that many frogs into safety until our own dedicated holding facility is up and running.

The morning was taken up by packing and seeing Gerardo off to the airport. He's flying back to Jersey while I am staying for another two and a half weeks monitoring the transects and continuing with the trial treatment of frogs in the wild at Pelican Ghaut.



After Gerardo's plane left Montserrat, again a big crowd of helpers from the Forestry Department and the local vets, led by Nicholas Waldron came in and showed their expertise gained from last weeks export. It went incredibly smoothly this time. The rest of the morning was spent printing the labels and paperwork and giving all 26 frogs their final treatment baths here on Montserrat. Then the export boxes were labelled and lined with shredded paper to cushion the frogs in their individual bags.

For catching up the animals and bagging them, a small crowd of onlookers had gathered and especially the kids were very keen to get their picture taken holding a bag of Mountain Chicken. Fearing the worst, this might have been the last time they could have experienced these magnificent creatures.

We finished well in time and made our way to the airport, pickups loaded high with the export crates, where another small charter plane was waiting. Again, local vet Nicholas accompanied the frogs to Antigua to make sure the transfer onto the big plane to Europe went smoothly.



Thursday, 16.4.09

After Gerardo had left Montserrat for Jersey, I was moving house yesterday. Our previous accommodation cum Durrell headquarters was selected to accommodate up to five staff for the initial phase of our emergency response. Now with only me as the only Durrell staff left, a smaller and cheaper apartment would have to make do.

Conducting field work in the Caribbean usually means bringing not much more luggage and equipment than you can carry. This time it was different: all the sampling equipment, boxes full of disinfectants and gloves, bags of samples collected, tools and, yes, food left for me meant nothing less than asking the Forestry Department for one of their pick-up jeeps to help carry out the task.

The transect to visit at night was Sweetwater, not far from the extended village and therefore a prime collection spot for hunters of Mountain Chicken in the past. Blacka pointed out to me where not many years ago you would in good nights have to be careful where to put your foot in order not to tread on a Mountain Chicken, despite the hunting pressure. The place was very dry and the few pools left in the bed of the small stream would be where any frogs would congregate now. We didn't see a single one.

At a couple of good spots we stopped and just sat there for an hour with our lights off, listening for calls or rustling sounds in the leaf litter. Many small Agoutis came by, their noise in the leaves easily recognised. Then, a bit later, we heard them: dry leaves crushed by something heavy hopping down the slope to the water. Every time though we switched on our lamps, all those hoppers were big cane toads which occur in enormous numbers in every habitat now. This species is an introduced amphibian to Montserrat and is not affected by the chytrid fungus but can carry it around as a reservoir species. Quite likely, the fungus will arrive at the last healthy Mountain Chicken population at Fairy Walk by cane toad.



On a brighter note, we received the news that all exported frogs from the second shipment arrived safely and in good condition at Parken Zoo in Sweden, where zoo staff was unpacking and treating the 26 frogs until 5am!

Again, everyone involved in Montserrat is very please to hear that another such big undertaking was completed without any problems to the animals shipped.

Sunday, 19.4.09

Here in Montserrat I've settled into the routine. During the day it's mostly continuing the post mortems on dead frogs collected in the initial phase of our emergency response. When taking the bodies apart, it is quite impressive what an immense muscle mass these large frogs possess, especially in their thighs. Although knowing that this species was regularly prepared as a traditional dish on the islands it occurred, I always thought it a bit pointless hunting for frog legs anywhere. But however you look at it, skinned legs from adult Mountain Chicken actually do compare to a small chicken drum stick in size and meat available...



Walking the various transects continues at night and so far, the areas where this species had vanished remain empty. At Pelican where the experimental treatments continue, we had slightly optimistic feelings when, additionally to the few frogs we re-capture every other day, another three frogs were heard calling from high above the canyon bottom. But we still find some Mountain Chicken with signs of infection in various stages and now and then a dead frog, too.

On this location I had another very memorable encounter last night. It is known to us and has been observed many times by others, that the introduced rats, which unfortunately occur everywhere on the island in vast numbers, are actually quite vicious predators. These opportunistic animals will feed on anything and were observed even attacking alive and healthy cane toads and even Mountain Chicken. Gerardo and others reported such cases in the past and many of the frogs found over the past years showed severe scars and injuries caused by rat bites. Yesterday then I could witness one such attack as Blacka and I sneaked around a corner of a big rock, alerted by a loud rustling noise in the leaf litter. And there was this rat trying to drag a perfectly healthy (we made sure afterwards) and alive Mountain Chicken nearly the same size than the rat into a crevice. Unfortunately, I was not quick enough getting my camera out of the bag before the rat noticed us and escaped. The picture here shows the bleeding bite marks of the rat's teeth on the frogs lower leg.



This encounter was a stark reminder that not only human hunters and the chytrid fungus are a severe danger to the Mountain Chicken. Apart from the habitat destruction caused by the volcano... but that, if a small number of frogs would survive the infection or if we could re-introduce Mountain Chicken back to the island at some point at some location, a successful control of the rat population would have to be carried out as well.

Thursday, 23.4.09

A break from the usual transect routine was a quick stint into Montserrat's exclusion zone. This zone was set up after the outbreak of the Soufrieres Hills volcano in 1998 and the whole southern half of the island falls within it. Most of this part of the island is covered with volcanic rock, lava and ashes which also buried the former capital Plymouth. There are some hills left in the south and north of it which are still vegetated, some have abandoned villages. Access is banned without official escorts by the police or the Montserrat Volcano Observatory so we arranged for an officer to accompany us. The task in mind was to collect cane toads to take swabs for chytrid fungus in an attempt to see whether the disease is present there as well (did infected toads manage to travel there? Can the fungus persist in the toads with all the acidic ashes around?).



Unfortunately, my plan to advance into the lava fields was cut short as the time our escort was able to spend was cut short. So we had to make do with sampling in the vegetated areas closer to the northern boundary of the zone. Still, it was an experience to be in this area with abandoned streets and houses where everything seems normal apart from the lack of people and noise and the layer of ashes and dust covering everything, thick dust clouds swiping past. Despite the dry conditions we found some toads, all covered in the grey dust. After a short bath in water to make potential chytrid cells expel their zoospores for the sampling, they were swabbed and then released again.



Visits to Pelican remain encouraging as the frogs we still find when treating them seem to cling on. There was even a first encounter of a juvenile Mountain Chicken, maybe from last years hatch.

A visit to Fairy Walk, the last completely healthy population as far as we know, yielded still no dead frogs but in the neighbouring transect of Corbet Spring we encountered some dead ones. This stream is not separated from Fairy Walk by high ridges like most other transects are from each other and we must fear that the fungus is making it's way up that stream and possibly soon into Fairy Walk. We are continuing to monitor the situation.

As soon as the sun set, Blacka and I were off again to the Pelican transect to collect any Mountain Chicken we could find, continuing the experimental treatments. It was again a long night out there processing the frogs we found in different states of health. Some seemingly healthy and in good shape, some with clear signs of infection and a few very recently deceased frogs we took with us for post mortems, all of which showed the typical pink discolouration, bleeding lesions and a marked change to their skin which the frogs can't keep moist any more in an advanced state of infection.



This work will now continue for the next weeks: trial treatments at Pelican every other night and the remaining nights monitoring various other transects where the frogs have all but gone. We will also be repeatedly visiting the last remaining strong population at Fairy Walk in order to be able to detect the arrival of the fungal disease in this location; most likely the final fateful event for the species in its current distribution which is feared will happen any day now.