



Management Plan for Charlie Kākā held at Dunedin Botanic Gardens

General Information

Species	South Island Kākā (Nestor meridionalis)						
Name	Charlie	Life stage	Adult	Age	24+	Sex	Female
Hospital ID	2011155	Band	L49336	(right leg)			

Health Check

In July 2024, a comprehensive health check was performed on Charlie at Dunedin Wildlife Hospital (DWH) prior to moving her to Dunedin Botanic Gardens (DBG).

Due to pre-existing health conditions, it is recommended that Charlie has a comprehensive health check annually, more frequently if any concerns noted.

Next comprehensive health check is due in June 2025

Regular health assessments by keepers should be performed every time Charlie is captured for some reason e.g. weigh ins.

Behaviour and Welfare Assessments

Please refer to the comprehensive Behavioural and Welfare Assessment performed on the 9/8/24 for more context.

DWH Vet recommendations after a behavioural assessment performed at the request of MPI on 23rd July 2024

- 1. Adequate time is needed for Charlie to settle into the routine at the Dunedin Botanic Gardens. A minimum of 6 months with the caveat that if she does show signs of distress during this time that a prompt re-evaluation by DOC, DBG and DWG will occur to ensure her welfare is maintained.
- 2. Comprehensive records for Charlie are required to be provided from Te Anau Aviaries. These should include but are not limited to:
 - a. Weights how regularly she is weighed as well as the range of weights at different times of the year to help generate a picture of her weight range at different stages e.g. winter vs breeding vs Autumn weights etc. Ideally an assessment of body condition score will accompany these weights.
 - b. Diet sheet specifically outlining any foods she prefers or dislikes.

- c. Behavioural observations specifically observations of the described stereotypie, the frequency, patterns and potential triggers (if known).
- d. Training Routine (if applicable).
- e. Enrichment routines in particular if she has any preferred enrichment items she likes to engage with.
- 3. After a settling in period a comprehensive behaviour and welfare assessment is performed by myself, similar to the assessment I provided for Jimmy kākā. Propose mid/late-August as a timeline due to multiple observations already being done recently. A follow-up assessment should be scheduled 6 months later (sooner if concerns are flagged by the DBG Curator) to monitor progress.
- 4. The curator has already initiated behavioural observations of Charlie. These occur three times a day at the same or similar time each day and the duration is 15 minutes. I recommend these continue for at least another 4 weeks and then we can review the results and make adjustments as needed.
 - a. Once/if records from Te Anau are received a good objective assessment of progress will be possible so that further actions/plans can be implemented, if necessary, by the curator at DBG.

Progress on above recommendations:

Point 1: Still early days, Charlie continues to display stereotypical/abnormal behaviour however a subsequent veterinary assessment in August provides some more insight into this.

Point 2: Some information has been provided re: diet, preferred enrichment and occasional training programme however no comprehensive records appear to exist with regards stereotypical/abnormal behaviour that has been present for 20+ years.

Point 3: August completed, timeline for follow-up assessment moved up to end of October.

Point 4: Completed over 2 months. Unfortunately, there are only scant or no meaningful behaviour records from Te Anau to assist with making objective assessments of Charlie in Dunedin.

Plan August – September

As Charlie has pre-existing stereotypies there is a focus on quantifying this behaviour, determining if there are any current triggers and working on providing enrichment opportunities in an attempt to minimize the stereotypies, if at all possible.

- 1. DBG team to perform daily observations 3 times a day and document Charlie's behaviour repertoire.
- 2. Work on slowly building trust with Charlie so facilitate working with her in a mutually trustworthy environment.
- 3. Weigh Charlie at least every 2 weeks to ensure she is maintaining/gaining weight.

- a. Start to incorporate T-perch training to facilitate easier weighing that doesn't require capture and potential damage to any trust that has been developing.
- 4. Start to reduce meloxicam dose to Spring levels (see Long-term medication plan for more details).
- 5. Update DWH Vets monthly on progress, more frequently if any concerns.

Plan October – December

- 1. Daily observations only if required or if any concerns that stereotypical behavioural repertoire is getting worse.
- 2. Continue working on building trust and if indicated start to incorporate more training e.g. continue with T-perch training, consider incorporating a bridge and reward for taking medication.
- 3. Monitor any behavioural changes that might be associated with increased pain due to reducing the meloxicam dose.
- 4. DWH Vets to do follow-up Behavioural Assessment in late October to determine if breeding season has had an impact on changing Charlie's behavioural repertoire as well as determine if stereotypies are getting better (or worse) as the case may be.
- 5. Weigh Charlie every fortnight and once satisfied she is maintaining weight consistently can revert to 3-6 monthly checks as is standard protocol at DBG.

Enrichment

It is well known that provision of enrichment is essential to reducing stererotypical behaviours and this is something that is being used to distract Charlie from swinging.

Preferred enrichment item for Charlie has been identified as the following:

1. Sprinklers/rain

Other forms of kākā appropriate enrichment are also regularly provided including chew logs, fresh browse, and opportunities to forage for food.

Since moving to DBG Charlie is now also housed with another kākā permanently as well as having pairs in adjacent aviaries she can interact with. This ability to socialize is essential for the mental health of parrots in captivity as they are extremely social and should hopefully help in distracting her from the behavioural repertoire she has developed over the past 20+ years.

General Communication

- 1. Monthly meetings to discuss progress with DOC SI kākā captive coordinators, DWH senior wildlife vet and DBG curator.
- 2. DBG curator and DWH vet to communicate regularly on Charlie's progress currently at least fortnightly but more regularly if any concerns.
- 3. Monthly reports from DBG to DOC and DWH on Charlies progress.



From: 9(2)(g)(ii) - DOC

Sent: Thursday, July 18, 2024 4:05 PM

To: 9(2)(g)(ii) @doc.govt.nz>; Aaron Fleming 9(2)(g)(ii) @doc.govt.nz>; 9(2)(g)(ii) @doc.govt.nz>; 9(2)(g)(ii) @doc.govt.nz>; 9(2)(g)(ii)

@doc.govt.nz>; 9(2)(g)(ii) @doc.govt.nz>

Subject: REPORT: Aviary visit Dunedin Botanic Gardens

Hello,

Earlier this afternoon 9(2)(g)(ii) and I visited the Dunedin Botanic Gardens and met 9(2)(g)(ii) and had the opportunity to view and observe the kākā Charlie.

accompanied me at my request as he has previous experience at this facility, has worked with New Zealand parrots specifically the Kakapo and completed work on behaviour of wild animals. The aviary is a tall structure with a complexity of perches, hiding spaces and play boards. It provides ample room for the birds to fly around with in the aviary and contains a heated internal space within the back of the aviary includes a nesting box, perches and feeding area.

We spent about 30 minutes observing Charlie and the male bird Caesar. For one period of less than 3 minutes Charlie was observed swinging on the wire. At other times she moved up and down the aviary wire ran along some of the perches, interacted with Caesar, flew across the aviary and also sat quietly by herself, all normal behaviours for a kākā and observed in other birds in adjacent aviaries.

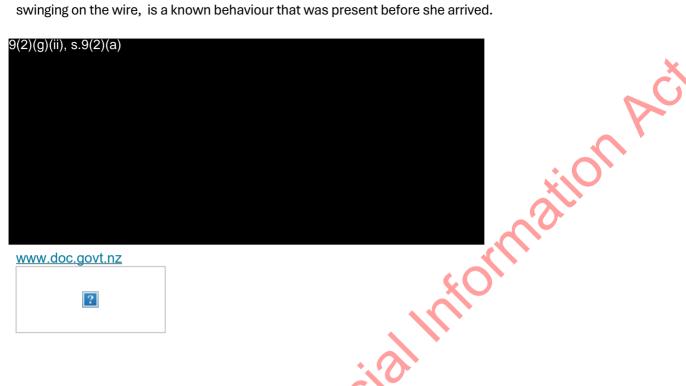
charlie is similar a mix of swing, sitting and interacting with birds. She's feeding regularly and is taking medication either off the hand or off cheese placed in a feeding bowl. The birds weight is unchanged.

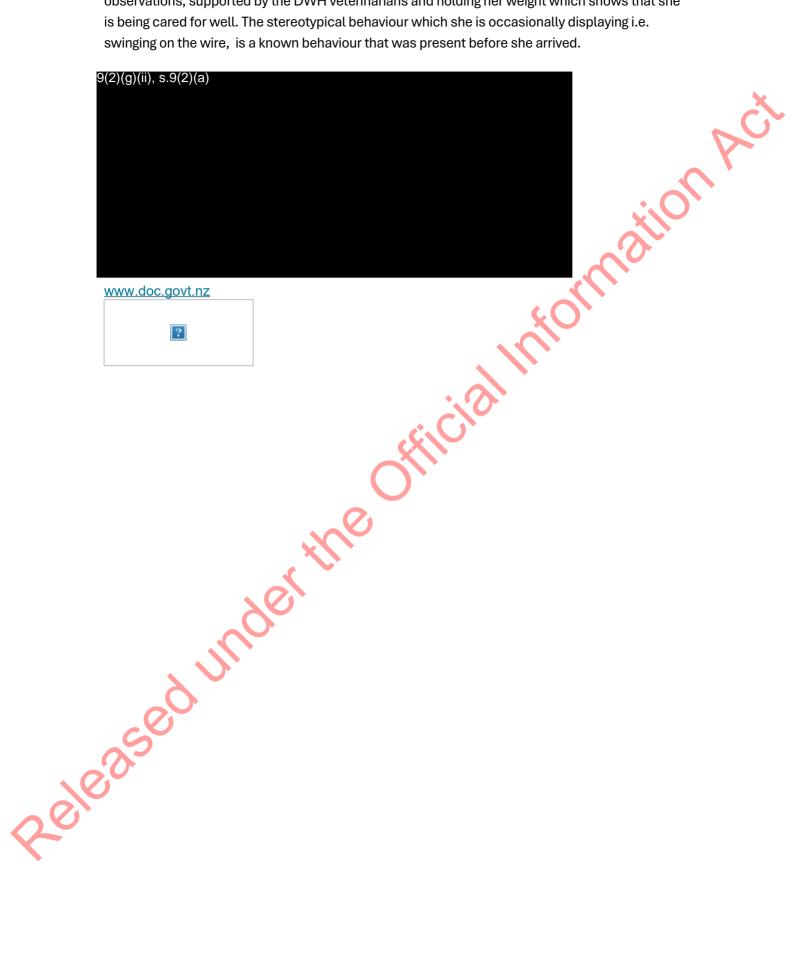
Charlie is in an aviary adjacent to more kākā including birds with whom she is previously familiar with from Te Anau.

The arrangements at DBG are appropriate and I think that the interactions between the birds are appropriate. Charlie is currently a quieter bird than some others but will join in the dawn chorus with the other kākā.

Overall, I think that Charlie is fitting into a new setting well, that she is under daily measured

observations, supported by the DWH veterinarians and holding her weight which shows that she is being cared for well. The stereotypical behaviour which she is occasionally displaying i.e.





From: s.9(2)(a)
To: 9(2)(g)(ii)
Cc: 9(2)(q)(iii

Wildlife Hospital Dunedin Staff

Subject: R

Date: Thursday, 20 June 2024 4:47:56 pm

Attachments: <u>image001.png</u>

Kia ora⁹⁽²⁾⁽⁹⁾⁽ⁱⁱ⁾

Thanks very much for the update. And no rush on this at all, your team needs to have their leave as undisturbed as possible. For now even just knowing it's pre-existing and has a potential trigger (being alone) is super helpful. Hopefully now that she is not alone this will resolve but we'll definitely monitor her closely with and keep everyone posted if we have concerns.

Ngā mihi



On Thu, Jun 20, 2024 at 4:43 PM 9(2)(g)(ii)

<u>@doc.govt.nz></u> wrote:

Kia ora koutou.

⁹⁽²⁾⁽⁹⁾⁽ⁱⁱ⁾ and I have just had a catch up, and can confirm that Charlie's swinging is a pre-existed behaviour. It has been observed recently and has emerged (or re-emerged) since she has been on her own. ⁹⁽²⁾⁽⁹⁾⁽ⁱⁱ⁾ also witnessed it the day she was transferred.

While our permanent Rangers are on leave, I'd prefer not to ask them for more detail. Would it be suitable to provide you with a more thorough report once staff return to work? This would likely be mid-July. Please let myself or [9(2)(9)(0)] know if there are concerns with this.

Thank you all for your hard work with testing, transfer and settling in this week.

Ngā mihi nui,

9(2)(g)(ii), s 9(2)(a)

@doc.govt.nz

	Te Anau District Office, Lakefront Drive, Te Anau 9600
	From: 9(2)(g)(ii) Sent: Wednesday, June 19, 2024 4:28 PM
	To: 9(2)(g)(ii) @dcc.govt.nz>; s.9(2)(a) @wildlifehospitaldunedin.org.nz>
	Cc: 9(2)(g)(ii) @doc.govt.nz>; 9(2)(g)(ii)
	9(2)(g)(ii) @wildlifehospitaldunedin.org.nz>
	Subject: RE: Charlie Kākā
	Kia ora koutou,
	Thank you for sending the updates through, and for the video which is a helpful tool in
	figuring our if this is a pre-existing behaviour. I do not have the answer at present, but I will meet with (2(2)(9)(0)) tomorrow when he is out of the field, and we will collate all the info we have
	on Charlie's behaviours. (2)(9)(iii) will send this through to you, please expect a response from us by tomorrow (Thurs) afternoon.
	Ngā mihi nui,
	9(2)(g)(ii). s.9(2)(a)
10	
00.	@doc.govt.nz
	Te Anau District Office, Lakefront Drive, Te Anau 9600

@dcc.govt.nz>

From: 9(2)(g)(ii)

	Sent: Wednesday, June 19, 2024 3:35 PM To: S.9(2)(a) @wildlifehospitaldunedin.org.nz>; 9(2)(g)(ii) @doc.govt.nz> Cc: 9(2)(g)(ii) @doc.govt.nz>; 9(2)(g)(ii)
	@doc.govt.nz>; 9(2)(g)(ii) @doc.govt.nz>; Wildlife Hospital Dunedin Staff 9(2)(g)(ii) @wildlifehospitaldunedin.org.nz> Subject: Re: Charlie Kākā
	Kia ora all,
	Just adding to g(2)(g)(ii) email above.
	Charlie appeared unphased, clam and interested in her surroundings and the other kaka on release today. Unfortunately, it was noted within the hour what appeared to me to be stereotypical swaying behaviour.
	Can we please get any relevant records for Charlie from the bird park staff or internal record system. This would help greatly as we move forward with Charlie's care in the coming months. As has indicated she has not been in Dunedin long enough to have established this stereotypical looking swaying behaviour so it would be great to get clarity from your staff via managers thanks. It may just be initial excitement from her new environment but it's good to flag this early. Other than the moments of swaying initially she has been actively exploring her enrichment and seems at ease.
	Thanks, team
	9(2)(g)(ii)
(Get Outlook for Android
2010	DCC Main Page
	If this message is not intended for you please delete it and notify us immediately; you are warned that any further use, dissemination, distribution or reproduction of this material by you is prohibited

From: S.9(2)(a)@wildlifehospitaldunedin.org.nz> Sent: Wednesday, June 19, 2024 12:35:11 pm To: 9(2)(g)(ii) @doc.govt.nz> Cc: 9(2)(g)(ii) : Wildlife Hospital Dunedin Staff 9(2)(g)(ii) @ wildlift hospitalth @dcc.govt.nz> Subject: Re: Charlie Kākā Kia ora koutou Just an update, Charlie has been moved to Dunedin Botanic Gardens this morning. I also wanted to flag a behaviour we noted on the weekend (see video attached). It might be stereotypical or just something she does when she is excited (or perhaps annoyed). I was chatting with her a little when she started doing this display but I wasn't sure how to interpret it. She didn't seem distressed by my presence so at this stage we're just noting it down. ^{9(2)(g)(ii)} has let us know that she has just observed similar behaviour once Charlie was released into her new aviary a short while ago. So maybe an excitement response to new/different stimuli? Either way along with 9(2)(9)(ii) we'll keep a close eye on this to see if we can figure out the cause/reason and also of course also make sure she hasn't got some long standing stereotypical behaviour that we need to now work on. Hopefully the

stimulating environment at DBG and also now being able to socialise with so many other kākā will eliminate any pre-existing behavioural issues.

9(2)(g)(ii), do you know if this behaviour has been observed in Te Anau? It will be helphil to belp me figure out some timelines. She hasn't been in hospital long enough to develop any stereotypies and when she was in hospital previously (2019) we did not note this behaviour.



Ngā mihi



9(2)(g)(ii), s.9(2)(a)

On Mon, Jun 17, 2024 at 2:41 PM s.9(2)(a) @wildlifehospitaldunedin.org.nz> wrote:

Kia ora koutou

I've looped ⁹⁽²⁾⁽⁹⁾⁽ⁱⁱ⁾ into the email chain now that she is back from leave.

Almost all of Charlie's test results are back (Chlamydia due tomorrow apparently), and I am happy to say we have not picked up any infectious diseases or any other health issues (excluding pre-existing of course).

One of the tests we ran is to assess the level of inflammation in the body, something we've found extremely handy in determining how a patient with arthritis is responding to therapy. This test came back in the normal range which suggests that the metacam Charlie is on for her arthritis is working to manage her discomfort. We have room to move now on trying to reduce the dose rate of this drug to the minimum amount that will still effectively manage her pain. This is always the goal with any long term treatment, to find the lowest effective dose. Long term metacam can have side effects on the kidneys so it is important we try to reduce the amount as much as possible. Arthritis is generally worse over winter so we won't do anything to reduce the dose until Spring and we will work closely with ocome up with a plan for how we do this.

In herself Charlie is taking everything in her stride and is pretty interactive with our team. She is likely starting to get bored though, hospital is not a super stimulating environment so I'm keen to discharge her ASAP.

⁹⁽²⁾⁽⁹⁾⁽ⁱⁱ⁾can we tentatively aim for tomorrow (Tuesday) or Wednesday for Charlie to head over to DBG, pending the results of the Chlamydia PCR? I am 99% sure we'll get a negative result.

Ngā mihi



9(2)(g)(ii), s.9(2)(a)

On Mon, Jun 10, 2024 at 12:33 PM s.9(2)(a) @wildlifehospitaldunedin.org.nz> wrote:

Kia ora koutou

Just a quick update on Charlie. She is doing well in hospital but as expected, not eating. This is not unusual for kākā in a hospital setting and my team is very experienced at managing this.

In-house health tests all good so far. Other samples have been sent to the lab this morning.

We'll be in touch again once results trickle in.

I am currently at home with COVID so haven't had a chance to closely review the x-rays to see if any changes compared with previous. I will do that once I am back at work, hopefully by the end of this week.

Ngā mihi

342 AY A' I, S

On Fri, Jun 7, 2024 at 2:51 PM 9(2)(g)(ii) @doc.govt.nz> wrote:

Kia ora all,

No health screening had started here in Te Anau before Charlie's transfer, for which I apologise.

For context, both permanent Rangers are on leave for the month of June, with our usual two casual staff overseas. As a result, the Te Anau Bio team have stepped in to cover. It has been mostly myself and two others that have trained up and have been covering daily shifts at the Bird Sanctuary. Due to limited capacity (we are trying to stay on top of our regular work at the same time), we did not start any pre-transfer testing.

Hope this clears up any confusion, and please feel free to call or email me with any questions or concerns. A phone call is likely best at the moment while I am working extra hours and away from my desk.

Thank you very much for the update regarding Charlie settling in, I will pass the update along to staff when I next speak with them. We really appreciate that you were able to take her at short notice, and a week earlier than anticipated. Thank you.

Ngā mihi nui,

9(2)(g)(ii), s.9(2)(a

@doc.govt.nz

Te Anau District Office, Lakefront Drive, Te Anau 9600

From: s.9(2)(a) @wildlifehospitaldunedin.org.nz>

Sent: Friday, June 7, 2024 1:49 PM

To: 9(2)(g)(ii) @doc.govt.nz>

9(2)(g)(ii) <u>@doc.govt.nz</u>>; Wildlife Hospital Dunedin Staff

9(2)(g)(ii) @wildlifehospitaldunedin.org.nz>

Subject: Re: Charlie Kākā

If we can please have results forwarded to us so we don't double up and waste \$\$ that would be great.



On Fri, Jun 7, 2024 at 1:47 PM **9(2)(g)(ii)** wrote:

@doc.govt.nz>

Thanks ^{5.9(2)(3)}

I did ask them to start health screening in anticipation of the move on the 14th...so at least one set of samples should have gone.

I assured @DBG that Charlie would be have all necessary Health checks before arriving at the gardens.

Thanks so much

9(2)(g)(ii)

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From: s.9(2)(a) <u>@wildlifehospitaldunedin.org.nz></u>

Sent: Friday, June 7, 2024 1:38:19 PM

@doc.govt.nz>

Cc: Wildlife Hospital Dunedin Staff < 9(2)(9)(ii) @wildlifehospitaldunedin.org.nz>

Subject: Charlie Kākā

Kia ora Koutou

Charlie has arrived in Dunedin safe and sound and is settling in to her enclosure and actively exploring and chewing the browse we've offered.

We'll let her settle for a few days and then start the process of health checks.

I'll let you know the results once we have them.

9(2)(9)(ii), further to your email, because Charlie was moved up to Dunedin a week earlier than planned I highly doubt any health screening was done so we will take all the samples up here. We'll be doing blood tests (Biochemistry, CBC, PCV, TP) to screen for general overall health, we'll check lead levels as that is often an issue in captive kākā, we'll check fibrinogen levels to assess inflammation and how she is responding to treatment for arthritis, we'll take samples for Chlamydia and PBFD as well as do some faecal screening. We'll do most of this sampling while she is under general anaesthesia so we can also get a fresh set of x-rays to assess the old fractures.

Ngā mihi



https://www.wildlifehospitaldunedin.org.nz

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