



Hicks, Scott &lt;scott\_hicks@fws.gov&gt;

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**Re: [EXTERNAL] RE: lynx DNA**

1 message

**Randi Meyerson** <rmeyerson@dzs.org>

Fri, Mar 29, 2019 at 11:35 AM

To: "DePue, John (DNR)" &lt;depuej1@michigan.gov&gt;, "Kennedy, Daniel (DNR)" &lt;kennedyd@michigan.gov&gt;, "Straka, Kelly (DNR)" &lt;strakak1@michigan.gov&gt;, "Hicks, Scott" &lt;scott\_hicks@fws.gov&gt;, Ann Duncan &lt;aduncan@dzs.org&gt;

Cc: "Jack\_Dingledine@fws.gov" &lt;jack\_dingledine@fws.gov&gt;

I agree with waiting. If results do indicate captive history I think for her welfare in addition to that of wild population, we should rethink her release. We wouldn't want to release her without ability to hunt and survive.

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**Randi Meyerson, DVM, MSc**  
**Deputy Chief Life Sciences Officer**

**Phone:** (248) 336-5756**Email:** [rmeyerson@dzs.org](mailto:rmeyerson@dzs.org)

Detroit Zoological Society  
8450 W. 10 Mile Rd., Royal Oak, MI 48067



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**From:** Ann Duncan**Sent:** Friday, March 29, 2019 8:30:54 AM**To:** DePue, John (DNR); Kennedy, Daniel (DNR); Straka, Kelly (DNR); Randi Meyerson; Hicks, Scott**Cc:** Jack\_Dingledine@fws.gov**Subject:** RE: [EXTERNAL] RE: lynx DNA

If results are available after a week, we'll have them middle of next week, and the lynx continues to do well and probably gain weight. We performed a fecal yesterday, and she is positive for parasites (as I would expect). I think we should not deworm her, but we can if you prefer.

How sensitive and specific is the test for determination of origin and/or domesticity?

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**From:** DePue, John (DNR) <DePueJ1@michigan.gov>**Sent:** Friday, March 29, 2019 11:11 AM**To:** Kennedy, Daniel (DNR) <KENNEDYD@michigan.gov>; Straka, Kelly (DNR) <StrakaK1@michigan.gov>; Randi Meyerson <rmeyerson@dzs.org>; Ann Duncan <aduncan@dzs.org>; Hicks, Scott <scott\_hicks@fws.gov>

**Cc:** Jack\_Dingledine@fws.gov

**Subject:** RE: [EXTERNAL] RE: lynx DNA

I would lean towards waiting for genetic results to ensure we do not release a domestic lynx, especially if there is chance of interaction with wild lynx.

John DePue

Wildlife Biologist

Michigan Department of Natural Resources

Baraga Customer Service Center

[427 US-41](#) North

Baraga, MI 49908

(906) 353-6651

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**From:** Kennedy, Daniel (DNR) <[KENNEDYD@michigan.gov](mailto:KENNEDYD@michigan.gov)>

**Sent:** Wednesday, March 27, 2019 7:43 PM

**To:** Straka, Kelly (DNR) <[StrakaK1@michigan.gov](mailto:StrakaK1@michigan.gov)>; DePue, John (DNR) <[DePueJ1@michigan.gov](mailto:DePueJ1@michigan.gov)>; Randi Meyerson <[rmeyerson@dzs.org](mailto:rmeyerson@dzs.org)>; [aduncan@dzs.org](mailto:aduncan@dzs.org); Hicks, Scott <[scott\\_hicks@fws.gov](mailto:scott_hicks@fws.gov)>

**Cc:** [Jack\\_Dingledine@fws.gov](mailto:Jack_Dingledine@fws.gov)

**Subject:** Fwd: [EXTERNAL] RE: lynx DNA

FYI - looks like we will have DNA results by the end of next week. Should we wait that long before we release the lynx?

Dan

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**From:** Pilgrim, Kristine - FS <[kpilgrim@usdagcc.onmicrosoft.com](mailto:kpilgrim@usdagcc.onmicrosoft.com)>

**Sent:** Wednesday, March 27, 2019 6:13 PM

**To:** Kennedy, Daniel (DNR)

**Subject:** RE: [EXTERNAL] RE: lynx DNA

Hi Dan,

We will process this sample this week and early next week; and should have results to you by the end of next week.

Cheers,

Kristy

**Kristy Pilgrim, Laboratory Supervisor**

**National Genomics Center for Wildlife and Fish Conservation**

**Forest Service**

**RMRS/Wildlife & Terrestrial Ecosystems**

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800 E. Beckwith

Missoula, MT 59801

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**From:** Kennedy, Daniel (DNR) [<mailto:KENNEDYD@michigan.gov>]

**Sent:** Wednesday, March 27, 2019 2:47 PM

**To:** Pilgrim, Kristine - FS <[kpilgrim@usdagcc.onmicrosoft.com](mailto:kpilgrim@usdagcc.onmicrosoft.com)>

**Subject:** RE: [EXTERNAL] RE: lynx DNA

Hi Kristine,

My name is Dan Kennedy and I'm the endangered species coordinator for the Michigan DNR. I wanted to thank you for agreeing to test the DNA of the lynx that was captured in Michigan and currently residing at the Detroit zoo. Thanks!! We were wondering what kind of timeframe it would take to get the results? Days, weeks, months? We're wondering if the DNA test can help us decide where to release the lynx.

Thanks again!!

Dan

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Dan Kennedy  
Endangered Species Coordinator  
Michigan DNR, Wildlife Division  
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[Office: 517-284-6194](#)

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**From:** Pilgrim, Kristine - FS <[kpilgrim@usdagcc.onmicrosoft.com](mailto:kpilgrim@usdagcc.onmicrosoft.com)>  
**Sent:** Tuesday, March 19, 2019 11:51 AM  
**To:** Zelenak, Jim <[jim\\_zelenak@fws.gov](mailto:jim_zelenak@fws.gov)>; Straka, Kelly (DNR) <[StrakaK1@michigan.gov](mailto:StrakaK1@michigan.gov)>  
**Cc:** Kennedy, Daniel (DNR) <[KENNEDYD@michigan.gov](mailto:KENNEDYD@michigan.gov)>; Hicks, Scott <[scott\\_hicks@fws.gov](mailto:scott_hicks@fws.gov)>;  
[Jodi\\_Bush@fws.gov](mailto:Jodi_Bush@fws.gov); Lori Nordstrom/R6/FWS/DOI <[lori\\_nordstrom@fws.gov](mailto:lori_nordstrom@fws.gov)>; Catton, Susan J -FS  
<[scatton@fs.fed.us](mailto:scatton@fs.fed.us)>; Bowman, Jeff (MNRF) <[jeff.bowman@ontario.ca](mailto:jeff.bowman@ontario.ca)>; Ron Moen <[rmoen@d.umn.edu](mailto:rmoen@d.umn.edu)>  
**Subject:** RE: [EXTERNAL] RE: lynx DNA

Dear Kelly,

Attached is our chain of custody and DNA handling/storage recommendations; feel free to call or e-mail me if you have other specific questions about sampling. We can test the DNA and see if it matches any of the known individuals from the MN population for you.

Sincerely,

Kristy

**Kristy Pilgrim, Laboratory Supervisor**

**National Genomics Center for Wildlife and Fish Conservation**

**Forest Service**

**RMRS/Wildlife & Terrestrial Ecosystems**

<http://www.fs.fed.us/research/genomics-center/>

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800 E. Beckwith

Missoula, MT 59801

**From:** Zelenak, Jim [[mailto:jim\\_zelenak@fws.gov](mailto:jim_zelenak@fws.gov)]

**Sent:** Monday, March 18, 2019 4:26 PM

**To:** [StrakaK1@michigan.gov](mailto:StrakaK1@michigan.gov)

**Cc:** Kennedy, Daniel (DNR) <[KENNEDYD@michigan.gov](mailto:KENNEDYD@michigan.gov)>; Hicks, Scott <[scott\\_hicks@fws.gov](mailto:scott_hicks@fws.gov)>; [Jodi\\_Bush@fws.gov](mailto:Jodi_Bush@fws.gov); Lori Nordstrom/R6/FWS/DOI <[lori\\_nordstrom@fws.gov](mailto:lori_nordstrom@fws.gov)>; Catton, Susan J -FS <[scatton@fs.fed.us](mailto:scatton@fs.fed.us)>; Pilgrim, Kristine - FS <[kpilgrim@usdagcc.onmicrosoft.com](mailto:kpilgrim@usdagcc.onmicrosoft.com)>; Bowman, Jeff (MNRF) <[jeff.bowman@ontario.ca](mailto:jeff.bowman@ontario.ca)>; Ron Moen <[rmoen@d.umn.edu](mailto:rmoen@d.umn.edu)>

**Subject:** Re: [EXTERNAL] RE: lynx DNA

Thanks Scott, Dan and Kelly,

DNA would be used to see if the origin of this lynx can be narrowed down. Minnesota and the Superior National Forest have an extensive DNA database that was recently used to generate a population estimate for a portion of the Arrowhead area. They worked with the National Genomics Center for Wildlife and Fish Conservation (U.S. Forest Service, Missoula, Montana, USA), which also has worked with researchers in Montana and Colorado and thus has an even more extensive lynx genetics database.

I've copied Susan Catton with the Superior National Forest and Kristy Pilgrim with the Genomics Lab - they may be able to answer questions about what DNA samples to collect, handling, and transfer to the Genomics Lab. I'm not sure about payment, but I suspect the lab could store the sample(s) until I could figure out how to find some FWS money to pay for the analysis. Jeff Bowman (also copied here) and his students at Trent University in Ontario also have done a lot of lynx genetics work and likely have a database with which we could compare DNA from this Michigan animal.

We don't often get DNA samples from lynx outside the resident populations in the Lower 48, and it would be interesting to see if we can find out where this transient may have originated. This is the time of year when we expect last year's kittens to be venturing out on their own to establish territories while mom gets ready for another breeding effort; however, the long ear tufts and fairly well-developed facial ruff on this individual does not suggest kitten to me. Ron Moen (also copied here) may have a different and better-informed take.

Anyway, I think we should be able to find a way to get samples from this animal analyzed if we you can collect the samples and send them to the Genomics lab.

- Kristy - could you provide handling and shipping details to Kelly?

Hope this helps, and I look forward to hearing where this animal ends up going next and any genetic results as they become available.

Jim

On Mon, Mar 18, 2019 at 2:53 PM Straka, Kelly (DNR) <[StrakaK1@michigan.gov](mailto:StrakaK1@michigan.gov)> wrote:

Hi all!

Quick question-would the DNA be examined to confirm species, or does FWS keep a database of genetic data on lynx? We can certainly collect whole blood during the immobilization/physical exam as needed, let me know.

Thanks,

Kelly

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**From:** Kennedy, Daniel (DNR) <[KENNEDYD@michigan.gov](mailto:KENNEDYD@michigan.gov)>  
**Sent:** Monday, March 18, 2019 4:44 PM  
**To:** Hicks, Scott <[scott\\_hicks@fws.gov](mailto:scott_hicks@fws.gov)>; Jim Zelenak <[jim\\_zelenak@fws.gov](mailto:jim_zelenak@fws.gov)>  
**Cc:** Straka, Kelly (DNR) <[StrakaK1@michigan.gov](mailto:StrakaK1@michigan.gov)>  
**Subject:** RE: lynx DNA

Thanks for initiating the discussion Scott. I've added Dr. Straka to this conversation, she's our wildlife veterinarian – please include her on this discussion thread from here on out.

Dan

**From:** Hicks, Scott <[scott\\_hicks@fws.gov](mailto:scott_hicks@fws.gov)>  
**Sent:** Monday, March 18, 2019 4:34 PM  
**To:** Jim Zelenak <[jim\\_zelenak@fws.gov](mailto:jim_zelenak@fws.gov)>  
**Cc:** Kennedy, Daniel (DNR) <[KENNEDYD@michigan.gov](mailto:KENNEDYD@michigan.gov)>  
**Subject:** lynx DNA

Jim,

I spoke to Dan briefly about your idea of collecting a DNA sample. He's definitely open to the idea, but asked about logistics, of what to collect, who could process, who would pay, how soon could they get results...? (Dan others to add to that list?).

Any leads/thoughts on those questions?

Thanks  
Scott

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Jim Zelenak, Biologist

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