

## Klein, Kimberly KK

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**From:** Beth Sharp <esharp@hilcorp.com>  
**Sent:** Thursday, March 23, 2017 10:25 AM  
**To:** Putnam, Christopher  
**Cc:** Klein, Kimberly KK; Alaska NS - Endicott - Enviro Tech - ACS; Lance Douglas - (C); Alaska NS - Endicott - Field Foreman; Alaska NS - Endicott - Security Desk; Alaska NS - Environmental Specialist; Alaska NS - EHS - Specialist - Endicott & Northstar; Bo York; John Barnes  
**Subject:** RE: FW: PB plan  
**Importance:** High

Hi Christopher, It's been about 36 hours since anyone has seen anything on the camera. Per your email below, Lance, the current ACS tech is planning to go out this afternoon on a snow machine to survey for tracks in circle a half-mile away from the den. Before heading out on the snow machine, he is going to drive to the high point of the resolution bridge this morning, which is just under a mile away from the Skookum bridge and den location (0.9 mile) and use binoculars to do a visual survey of the area to see if he can spot any bears. If he does, obviously the snow machine trip will be cancelled.

Let us know if you have concerns about this plan.

Thanks,  
Beth

**From:** Putnam, Christopher [mailto:christopher\_putnam@fws.gov]  
**Sent:** Monday, March 20, 2017 12:28 PM  
**To:** Beth Sharp <esharp@hilcorp.com>  
**Cc:** Klein, Kimberly <kimberly\_klein@fws.gov>  
**Subject:** Re: FW: PB plan

Hi Beth,

Great job on everyone involved with this den. We agree that this one is proceeding smoothly thanks to everyone's efforts. The protocol for resuming normal activities is simple. If the den entrance is under 24-hour observation, when the bears are observed departing the area, if they don't return within a 24-hour period, we assume they have abandoned the den. Normal activities may then resume. If the den entrance is not under 24-hour observation, from when the bears were last observed departing the area, if they don't return within a 48-hour period, we assume they have abandoned the den. After 24-hours we may use snow machines or other vehicles to survey for tracks in circle a half-mile away from the den. We're looking for one set of tracks leaving the area, and none returning. If we locate a single set of tracks, we may do another circle at a quarter-mile distance. We may also use a FLIR camera to image the den to see if there is any indication that bears are inside. Either way, we still wait a full 48-hours. Then, normal activities may resume if no bears are observed at the den.

I'd like to emphasize that right now the bears are most susceptible to disturbance, particularly the female. Her behavior is now what we call "hyper vigilant". She is on alert for any possible threat to the cub. We must be very careful to avoid disturbing her at this time. The risk is that she may perceive a threat and leave the den before the cub is ready. If the cub is forced to leave the protection of the den too soon, it may die. Other polar

bears are also a big risk to the cub right now. This is why we take this time so seriously and carefully. Since the den is now open, and the bears are venturing out into the open, there is more risk.

The average time for female polar bears and cub(s) to spend lingering at the den site after emerging is a few days to a few weeks. It all depends on how comfortable the female bear is with leaving for the sea ice with the cub. She hungry and motivated, but also very cautious and protective. So, for planning purposes, we may assume that these bears will likely be gone by the end of March, possibly sooner. If you want to resume normal activities as soon as possible after the bears depart, then 24-hour observation of the den entrance will be needed. It appears that the cameras at the site right now can't view the entrance. You could place a camera in a position to view the entrance. You may want to consider placing an observer(s) in a vehicle about a quarter-mile to half-mile away with a view of the entrance and proper equipment (e.g., binoculars, FLIR camera, photo/video camera). If you decide to use observers, keep in mind that observations must be 24-hours a day. Logistics for crew change, meals, etc., will have to ensure 24-hour observation. Or, we just go with what is in place and use the 48-hour protocol when we observe her leave the area.

I realize that that folks are eager to resume normal observations. That's normal and anticipated. Each time we deal with one of these dens in proximity to industry activity, this is the time-period that is most stressful for everyone. We completely understand. Let's keep in mind that everyone has done a great job dealing with this den so far. We aren't quite out of the woods yet. This is the critical time. We must be patient and careful. I wasn't planning on travelling up to the slope to be on-site since it seems everything is well under control and I have confidence that things will proceed smoothly. However, I am completely available to do so if you think my presence will contribute to the success of the outcome. I understand that there may be a lot of pressure to act prematurely and resume normal operations. I'd like to make clear that the pressure is on me. It is my decision when to say the bears are gone and normal operations may resume. This is all part of compliance with the terms of the Hilcorp LOA. If you are receiving pressure, then please relay that such communications should be directed to me. I'm happy to come up and provide support and advice. We can help with establishing suitable observation of the den, provide assistance with scouting the area for tracks and other bear sign, using the FLIR, and other things. We have a lot of experience dealing with these situations, so we are your best asset. Please let me know how we can help.

Otherwise, with a bit of patience and care, this will be over soon. Mama bear and the cub will wander off onto the ice and go do bear things, and we can all get back to our typical routine. We've found it useful to have an "after action" meeting at some point to discuss lessons learned and how to improve the response to these dens. In this instance, we've all benefited from past experiences. I think things will continue to go smoothly and I'm very grateful for everyone's efforts. Kim and I are available to help in any way we can.

Christopher Putnam  
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"All that is gold does not glitter, not all those who wander are lost; the old that is strong does not wither, deep roots are not reached by the frost."

-- J.R.R. Tolkien

On Mon, Mar 20, 2017 at 9:49 AM, Beth Sharp <[esharp@hilcorp.com](mailto:esharp@hilcorp.com)> wrote:

Hello Christopher and Kimberly,

The sow and cub went back into the den Saturday night at about 10pm. They remained out of sight until this morning when the sow was spotted outside the den again. The location of the den and the exit hole, and the topography of the den location is going to make it challenging to see everything that's going on. As I mentioned to the crew below, we will err on the cautious side and probably give it more than 24 hrs of no visible activity before assuming she and cub are gone and can do a FLIR from the bridge as confirmation. We will of course get your buy-in before re-opening the road.

Below is a string of emails with advice from the PBI guys. We will continue to monitor the situation and keep you updated. Photo from this morning attached (sort of a "Where's waldo?" shot).

Beth Sharp

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**From:** Beth Sharp

**Sent:** Monday, March 20, 2017 9:36 AM

**To:** 'Geoff York' <[gyork@pbears.org](mailto:gyork@pbears.org)>; Alaska NS - Environmental Specialist <[AlaskaNS-EnvironmentalSpecialist@hilcorp.com](mailto:AlaskaNS-EnvironmentalSpecialist@hilcorp.com)>; BJ Kirschhoffer <[bj@pbears.org](mailto:bj@pbears.org)>; Tom Smith <[tom\\_smith@byu.edu](mailto:tom_smith@byu.edu)>; Deborah Heebner <[dheebner@hilcorp.com](mailto:dheebner@hilcorp.com)>; Alaska NS - Endicott - Enviro Tech - ACS <[AlaskaNS-Endicott-EnviroTech-ACS@hilcorp.com](mailto:AlaskaNS-Endicott-EnviroTech-ACS@hilcorp.com)>; Alaska NS - Endicott - Security Desk <[AlaskaNS-Endicott-SecurityDesk@hilcorp.com](mailto:AlaskaNS-Endicott-SecurityDesk@hilcorp.com)>; Alaska NS - Endicott - Field Foreman <[AlaskaNS-Endicott-Field-Foreman@hilcorp.com](mailto:AlaskaNS-Endicott-Field-Foreman@hilcorp.com)>

**Subject:** RE: PB plan

Thanks Geoff and Tom for your sage guidance. The location of the den opening and the local topography I think is going to make it challenging to monitor her every move. I'm all for erring on the cautious side. Will likely be soliciting your input again throughout this emergence period. I think the determination that she's gone will need input from you and of course official buy-in from Christopher at USFWS.

I'll give Christopher a call today to give him an update.

Thank you Chuck et al. for keeping us all updated as things progress.

Beth Sharp

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**From:** Geoff York [<mailto:gyork@pbears.org>]

**Sent:** Monday, March 20, 2017 8:53 AM

**To:** Alaska NS - Environmental Specialist <[AlaskaNS-EnvironmentalSpecialist@hilcorp.com](mailto:AlaskaNS-EnvironmentalSpecialist@hilcorp.com)>; BJ Kirschhoffer <[bj@pbears.org](mailto:bj@pbears.org)>; Tom Smith <[tom\\_smith@byu.edu](mailto:tom_smith@byu.edu)>; Deborah Heebner <[dheebner@hilcorp.com](mailto:dheebner@hilcorp.com)>; Beth Sharp <[esharp@hilcorp.com](mailto:esharp@hilcorp.com)>

**Subject:** Re: PB plan

There is a fair bit of variability in residence time, activity, and departure time between individual polar bears. A den Steve Amstrup and I famously entered while still occupied falls into this category. In that case, all collared females that had denned (about 11 that year) had departed, consistent warmer and calm weather without visible activity led us to believe the den was vacated. We were wrong.

While I think it is very reasonable to request FLIR surveys (your team has been excellent in respectful and safe approaches from our discussions and experience), unless you can visually see the exit hole from the road, the results could be inconclusive without several days of cold stable weather (no new snow, no wind). Best results would be after sunset/before sunrise following a period of stable weather.

Given the great success of mitigation by all to date, I would agree with Tom to exercise caution for a few more days while working to obtain more information from FLIR, the camera, and possible sightings or tracks.

The female looked to be in excellent shape as did the single cub. As Tom mentioned, a singlet has the advantage and full focus of the sow.

Thanks for sharing the still shots and great work by all to date.

Geoff York

Senior Director of Conservation

Polar Bears International

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[gyork@pbears.org](mailto:gyork@pbears.org)



On Mar 20, 2017, at 10:43 AM, Geoffrey York (b) (6) > wrote:

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**From:** Tom Smith <[tom\\_smith@byu.edu](mailto:tom_smith@byu.edu)>

**Date:** Monday, March 20, 2017 at 9:08 AM

**To:** Alaska NS - Environmental Specialist <>, 'BJ Kirschhoffer' <[bj@pbears.org](mailto:bj@pbears.org)>, " (b) (6) (b) (6) >

**Subject:** RE: PB plan

Even cutting tracks is a bit iffy, given that the river is a major thoroughfare and other bears may pass by this time of year. I don't recall seeing bears leaving in the dark but perhaps BJ will recall otherwise. Usually we don't push it but in your case some resolution would be nice. With an open den a FLIR should be able to quickly determine presence or absence of the bears... that's what I would do as it seems you can FLIR from the bridge with no risk at all.

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**From:** Alaska NS - Environmental Specialist [<mailto:AlaskaNS-EnvironmentalSpecialist@hilcorp.com>]

**Sent:** Monday, March 20, 2017 8:58 AM

**To:** 'BJ Kirschhoffer' <[bj@pbears.org](mailto:bj@pbears.org)>; Tom Smith <[tom\\_smith@byu.edu](mailto:tom_smith@byu.edu)>; (b) (6) ,

(b) (6) >

**Subject:** RE: PB plan

They have not seen any polar bear activity at the den site since about 9:45 on Saturday night. Endicott is proposing to ask USFWS about sending a team via truck to within ¼ mile of the den to attempt to locate any tracks and FLIR the den entrance in an effort to verify if they have departed???

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**From:** Alaska NS - Endicott - Enviro Tech - ACS

**Sent:** Monday, March 20, 2017 6:46 AM

**To:** Beth Sharp

**Cc:** Alaska NS - Endicott - Security Desk; Alaska NS - Endicott - Field Foreman; Alaska NS - Environmental Specialist; [tara.vicente@westonsolutions.com](mailto:tara.vicente@westonsolutions.com)

**Subject:** PB plan

Good morning Beth,

This den emergence has been really smooth from my perspective. A huge thanks to everyone that has been part of the discussions and contributed to the planning beforehand. Everything has been working great and that is due to committed people that have all pitched in to make this challenging situation relatively easy on everyone (not least of whom is the mama and baby polar bear!).

After putting on quite a show, we have not seen any polar bear activity at the den site since about 9:45 on Saturday night. Yesterday was another beautiful spring day with full sun and no winds and it is surprising that mom and cubby didn't come out of the den... We believe that they may have departed.

We have seen an increase of wind speed overnight and the weather forecast (see attached) is for it to continue to deteriorate. After sunrise this morning we would like to send a team via truck to within ¼ mile of the den to attempt to locate any tracks and FLIR the den entrance in an effort to verify if they have departed. If we can do not get a heat signature and/or see tracks leading away from the den, we would like to open the roadway.

Please give me a call if you want to discuss anything in more detail.

Thanks,

*Chuck Bartlett*

Endicott ACS Spill Tech.

Alt. Lance Douglas

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Personal Cell: 907-260-7678

## Klein, Kimberly KK

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**From:** Beth Sharp <esharp@hilcorp.com>  
**Sent:** Monday, January 15, 2018 12:19 PM  
**To:** Lemons, Patrick R  
**Cc:** MMM Reports, FW7; Putnam, Christopher; Klein, Kimberly KK; Alaska NS - Environmental Specialist; Bo York; John Barnes  
**Subject:** 2017 Reports for Hilcorp North Slope LOAs  
**Attachments:** PB Incidental-Sightings Annual Report\_2017\_Final.pdf; PB Intentional-Hazing Annual Report\_2017\_Final.pdf

Dear Mr. Lemons:

Please find attached Hilcorp Alaska's 2017 summary reports for both polar bear-walrus monitoring and for polar bear hazing activities. These reports are required under the USFWS Letters of Authorization (LOA) 16-16 and 16-INT-19, respectively.

If you have any questions or would like to request a paper copy of this report, please contact me at (907) 777-8436 or via email at [esharp@hilcorp.com](mailto:esharp@hilcorp.com).

Sincerely,

Beth Sharp  
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