

Lesser Sandhill Cranes, Annual Summary Homer, Alaska, Summer 2020

By Kachemak Crane Watch
A Project of the Center for Alaskan Coastal Studies

Season's Overview

Like so many cycles of nature, Homer's local Lesser Sandhill Cranes arrived as usual mid-April, with the first reported pair landing on April 9th. The first week of May, Kachemak Crane Watch began receiving reports of crane pairs showing up one at a time at observers' locations, indicating that the cranes had begun nesting. Most crane pairs were on the nest by May 20th.



This summer, Homer had good weather for successful nesting, with few big storms and fairly warm temperatures. By June 2, the first reports of hatched colts were received from local citizen scientists. Many of Kachemak Crane Watch's cooperators have provided nesting reports since KCW sponsored the 2011-2013 Nesting Ecology Study conducted by Michelle Michaud for a graduate studies project under the guidance

of Dr. Gary Ivey. This year, forty-two nests were reported, and 70 colts hatched.

While no deformities were reported this summer, a number of nests were destroyed by predators, or colts perished due to illness, predators, or were hit by a car. One colt body was sent to the state veterinarian for necropsy, but the results were not able to pinpoint the cause of death, although the colt was under weight for its size. Its sibling had also died after exhibiting similar symptoms to the other colt.

One other colt that was sent for necropsy from a different area of town was found to have succumbed to a fungal infection, likely aspergillosis. Its lungs and air sacs were filled with nodular lesions caused by the fungus, a fungal pneumonia. (See necropsy reports starting on page 16.)

Bears were reported destroying a nest, and a colt elsewhere was reportedly killed by a bear. One colt was killed by a horned owl, and two others were killed by coyotes. A vehicle most likely killed a colt found in a ditch by a road. Despite these deaths, 45 colts made it to fledging, a 64% success rate, comparable to other years. This year's nesting success rate was 78.6%. (See Tables, page 14.)

Unfortunately, the female adult of one family was shot by a pellet gun and died a miserable death due to being shot. The air-gun pellet penetrated the intestine, causing the crane to bleed to death. The second colt of this pair declined in health and shortly after the mother's death, disappeared, possibly also suffering a similar fate as the mother. Sadly, this is another incident of a crane family that habitually spent most of its time in someone's yard being killed by someone shooting the birds in the area near the house. It is not likely the adult would have been able to go very far after its injury.

Two years ago, a "hunter" shot two colts with arrows in a neighboring yard next to where they were raised. Incidents like these call into question the safety and fairness of "hunting" cranes or other birds in close proximity to houses within established subdivisions. Within Homer City limits, these two incidents would have been considered illegal. Outside the city limits, even within established subdivisions, shootings like this occur. For the safety of the residents within these areas, hunting should not be allowed.

Cranes have been living in neighborhoods throughout the Homer area for many years. They choose these locations because they have learned that human



neighbors help chase away predators. Most people enjoy their crane neighbors and delight in following their family life throughout the summer. It hardly seems fair for other people to shoot these neighborhood cranes just because it is hunting season. It is time for the Board of Game to close the hunting season on cranes on the Homer benchlands.

Sandhill Crane Count Days took place on August 22, 29, and September 5th this year. This is the fourth year Kachemak Crane Watch has counted cranes at Beluga Slough and area wide before the average departure date in mid-September. This year the numbers diminished each successive Saturday evening, but it appears that the cranes had not left but instead were using alternate roosts. On the 5th, only 66 were counted compared to 99 and 91 counted the previous two Saturdays. Counters watched a large flock of over 30 head off toward another roost rather than land in the Slough. It could be the significant eagle activity in the Slough made them decide to go elsewhere. Nonetheless, watching the cranes fly-in, dance, preen, and forage was still breathtaking in the golden sunlight of evening.



As cranes gathered over the pre-migration staging period after the first week of August until mid-September, Kachemak Crane Watch received constant reports of gathering flocks of varying sizes. September 3, at Inspiration Ridge Preserve's monitoring site, 103 was the biggest flock counted. Another site on the bench



below IRP, 180 cranes were reported on the ground, the largest group in Homer reported all summer. Groups of cranes slipped out of town starting around September 10th. Hundreds were reported passing over North Fork Road area heading south, most flocks coming from across Cook Inlet. September 28th, there were still 9 known cranes in the area from Anchor Point to the south to the head of Kachemak Bay—three separate families. One was the family whose female adult was shot. The other family of three just might have a colt not quite ready to fly to California. Later hatching colts sometimes need a bit more time so some families have to linger beyond the time most cranes have left. Another family, still trying to coax an injured colt to fly, was still in Anchor Point on September 30. At some point they have to make the difficult and heartbreaking decision to leave the colt.

With all the Pacific Northwest and California fires in the news, crane enthusiasts have been wondering how Homer cranes would fare migrating through these intensely smokey areas. Sandhill Cranes have been migrating between summer and winter habitats for millions of years. Having had to deal with smokey conditions during other migrations, they will avoid the fires and navigate the smoke!

Kachemak Crane Watch received an update from Bart McDermott, Manager, Stone Lakes National Wildlife Refuge where some of Homer's cranes go during the winter.



Lesser and Greater Sandhill Cranes at Stone Lakes National Wildlife Refuge near Sacramento. Photo provided by Stone Lakes NWR.

2019-2020 Sandhill Crane Update for Stone Lakes NWR, Central Valley CA

Bart McDermott

Refuge Manager

Stone Lakes NWR

California wetland managers continued to coordinate sandhill crane roost counts over the winter of 2019-2020. The staff at Stone Lakes NWR counted 746 lesser and greater sandhill cranes on the Refuge with a total of 7,771 roosting in the Delta in late November. There were over 33,000 sandhill cranes counted on protected wetlands and fields across the Central Valley and the northern and southern reaches of California. Of course, roost counts did not occur on any of the private farmlands in the Central Valley that flood up late in the season and provide temporary roost sites for cranes.

Wetland managers from the Central Valley met in Davis, CA in early March before the covid pandemic declaration for a 2-day workshop to network, learn about current research and technology being used to monitor waterbirds and wetlands, and discuss common challenges to managing habitat for migratory birds in the Pacific Flyway. Despite the covid outbreak, Refuge staff were able to conduct fieldwork on Stone Lakes NWR to control weeds and prepare wetland habitat for migratory birds over the spring and summer.

Much of the Central Valley and southern Oregon has been covered in thick smoke since mid-August. It's unclear how the smoke will affect migrating waterfowl and cranes as we anticipate their arrival. The last time we had this much smoke in the Central Valley was in 2018 in mid-November after the Paradise fire but that occurred largely after many of the cranes had already arrived. The refuge manager of Salton Sea NWR, reported on September 10th that they had a group of lesser sandhill cranes arrive, but they are a population that travel along the eastern side of the Sierras.

We continue to see conversion of wildlife compatible crops from silage corn, wheat, and irrigated pastures to almonds, vineyards, and urban development. Refuge staff have been talking with our partners about opportunities to establish easements with willing landowners to retain the rapidly vanishing farmland that provides foraging habitat for wintering cranes and shorebirds. The local sanitation district has been moving forward with a project, Harvest Water, to use highly treated wastewater to supply farmers with water for irrigation and help recharge ground water levels in the Cosumnes River Basin. The project also has

incentives for farmers who flood fields to provide roosting habitat for wintering sandhill cranes. The Refuge Friends Group, Friends of Stone Lakes NWR, continues to assist the staff with several issues that would affect the Refuge and impact migratory birds. Together we have been reviewing designs and providing the Department of Water Resources input on how their revised plans for the Delta Conveyance project's pumping facilities and tunnel construction operations in and around the Refuge would affect roost sites and public use programs. We are also providing input on the City of Elk Grove's new 12-story hospital that is being considered near North Stone Lake.



Stone Lakes NWR. Photo by Jeanne Cunningham

I want to share the incredible story I heard during the September pre-migration staging. Over the years I have had numerous reports about missing colts. Some of the missing colts were never found, and for those that were reunited, I never heard how the reunion happened. Until now! ~Nina Faust



Story: “The Missing Fledgling”

Email to Kachemak Crane Watch:

Bad news, Nina. The healthy colt that was successfully raised here in our neighborhood has disappeared. It was here with its parents late yesterday evening and they all three looked fine, but today when the parents appeared the colt was missing. The parents are acting unusually skittish and appear to be lingering and constantly looking for their colt. I suspect it may have fallen prey to an eagle after their evening departure from here and overnight stay at Beluga Slough. It also could've been hit by a vehicle on the nearby busy street which they sometimes used for a takeoff runway. Cars often had to brake for them when rounding the curve near their runway. Whatever the case may be, it's sad to think that it made it

this far only to lose its life at the eleventh hour just before migration. If you recall, one of their two colts last year disappeared just days before fledging. Our urban environment clearly isn't the friendliest or most ideal place for cranes to nest and raise their young. I hope other colts hatched this summer in and around Homer fare better and make it to the safety of their winter grounds in the Central Valley and return here next spring.

Email from Kachemak Crane Watch:

I have had emails from other Crane Watch cooperators who have reported lost colts. The colt might have had a flight mishap and gotten lost or was separated at the roost. The colt might show up in a day or two as I have seen this happen before. Do not give up hope yet. ~Nina

Email from Kachemak Crane Watch (the next morning):

I counted colts this morning in the Inspiration Ridge Preserve flock and had eight, one more than usual. After visually pairing seven colts up with their parents, I found this one wandering aimlessly in the flock. A few minutes later, this bewildered-looking colt was surrounded by seven adults standing nearly in a circle around it. Does this colt look like it might be your missing one? ~Nina



Is this the missing colt with the Inspiration Ridge Preserve pre-migration flock?

Email to Kachemak Crane Watch:

Good morning, Nina – and good news.

The two crane parents came again early this morning without their colt. We observed them apparently waiting in vain for their lost colt for some time before going about our own routines. Afterwards, our granddaughter came running and excitedly exclaimed that five cranes were now in the yard. Much raucous calling and squabbling between the four adult cranes ensued with the two resident cranes finally driving the newcomers off leaving the missing colt behind with its parents. As you suggested, the colt had apparently flown off with the wrong adults after mingling at the roost.

You were correct with your guarded optimism and hope, Nina. The three are again happily reunited and back to their old routines. We all felt the same sense of relief after feeling so dejected yesterday afternoon and evening. We are happy to share this good news with you.



Email from Kachemak Crane Watch:

I am so glad to hear this. Now if the wayward colt will just get better at flying and staying with his parents. Those four adults must have known where their friends who have colts hang out. It is amazing that the four delivered the colt. ~Nina

Crane social interactions and familial connections are apparently more complex than we know. Those four might have been family relatives like aunts, uncles, or cousins. The flock that the family travels with may be filled with related family members. I have heard stories, like last year where according to the human neighbor, the grandparents at the end of the season took care of a colt left behind by its parents. It finally migrated with the grandparents. The human neighbor said he was sure it was the grandparents as this pair had had colts at their place for many years but did not have any that year.

Anyway, what a wonderful crane story! Finally, I now know how one of these missing colt accounts was resolved.



End of “The Missing Fledgling”

Season Conclusion

More work and collaboration with others concerned about cranes across the Pacific Flyway can help our local cranes. Sharing our crane stories with other craniacs throughout the flyway region can bring benefits to cranes and other species. Even in Homer, we have work to do.

Beluga Slough, an area where three crane pairs nest and raise their young within view of delighted residents and visitors observing their life cycle from the boardwalk, still needs assistance. Intrusions by hikers, photographers, and dogs into the cranes' nesting habitat off the boardwalk and gravel trail still occur. More education and new signs will help next summer.

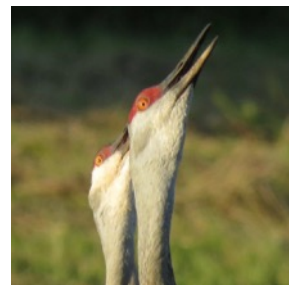
A new brochure by Kachemak Crane Watch and other cooperating local organizations is now available online and will be distributed through the Islands and Ocean Visitor Center and other organizations next summer. The brochure illustrates how visitors can enhance their opportunities to observe cranes, waterfowl and other birds by staying out of the nesting area and keeping dogs on a leash. The pamphlet is available for download here: http://cranewatch.org/wp-content/uploads/2020/04/CACS_BelugaSlough_trifold_Final_Dark.pdf

Kachemak Crane Watch appreciates its Citizen Scientists who provide detailed information about the cranes nesting nearby and local non-breeding flocks using the area. Learning about breeding success, mortality, and disease opens a window to the health and productivity of our local cranes. All the reports, including reports of the non-breeding flocks, helps make that window clearer. Citizen Science, collaborating with groups like Save Our Sandhill Cranes in Sacramento and the International Crane Foundation and providing information to the general public, are all ways to help educate people about cranes in both their summer and winter habitats.

Sign up for our email list on the Kachemak Crane Watch website at www.cranewatch.org. Remember, when you see cranes in the Kachemak Bay area from Anchor Point south, send your report to reports@cranewatch.org or call Kachemak Crane Watch at 235-6262. Reports to our main number and email are much more likely to reach Kachemak Crane Watch than random posts on social media.

Sandhill Cranes are enduring symbols of wilderness, their ancient trumpeting calls a reminder that constant vigilance is needed to preserve this magnificent species.

~Edgar Bailey, Co-founder, Kachemak Crane Watch





With an
intense
stare-
dare
someone to
challenge
you.

"Wisdom of the Cranes-Part 2"
© 2020, Nina Faust

Tables

Number of Reported Fledged Colts From Anchor Point South	
Year	Number
2020	42
2019	44
2018	49
2017	34
2016	30
2015	17
2014	24
2013	20
2012	24
2011	21
2010	36
2009	34
2008	33
2007	35
2006	36
2005	29
2004	23
2003	42

First Reported Arrival Dates	
Year	Date
2020	April 9
2019	April 2
2018	April 7
2017	March 29
2016	April 1
2015	April 21
2014	April 14
2013	April 19
2012	April 11
2011	April 21
2010	April 18
2009	April 9
2008	April 3
2007	April 2
2006	April 7
2005	April 13
2004	April 17
2003	April 20

Largest Premigration Flock at IRP	
Year	Number
2020	103
2019	88
2018	95
2017	100
2016	86
2015	99
2014	38
2013	95
2012	120
2011	105
2010	61
2009	82
2008	90
2007	118
2006	80
2005	78
2004	55
2003	100+

Nest Data					
Year	Nests	Colts Hatched	Colts Fledged	Nest Success	Fledging Success
2020	42	70	45	78.6%	64%
2019	38	68	44	78.9%	64.7%
2018	33	63	48	87.9%	76.2%
2017	29	54	34	-	63%
2016	30	49	30	-	61.2%

Beluga Slough Count Days									
Count Day	8/26/17	9/2/17	9/9/17	8/25/18	9/1/18	9/8/18	8/24/19	8/31/19	9/7/19
Colts	14	25	16	27	38	25	17	15	9
Adults	103	111	40	87	99	152	103	47	25
Total	117	136	56	114	137	177	120	62	34
Count Day	8/22/20	8/29/20	9/5/20						
Colts	16	12	16						
Adults	83	79	50						
Total	99	91	66						

Necropsy Reports from the Alaska State Veterinarian Office

Lesser Sandhill Crane Colt--Necropsy #1

Below are the details of the necropsy on the colt crane (Sample # A00812203) submitted on 6/29/20.

Body weight 0.5 Kg.

Thin body condition 2 out of 5.

Dehydrated, difficult to dissect and separate skin and tissues

Slight SQ hemorrhage on medial hock (R) and elbow of (R) wing

Bile staining on (R) side of abdominal cavity

No SQ or peritoneal fat

Kidneys- slight enlargement and hemorrhagic

Lungs/heart - NSF

Slight inflammation of lining proventriculus

Gizzard- small amount of seed, insect, insect larvae. Some sand, small stones and 15 to 20 pieces of silver coated metal fragments.

Smooth dull silver and black on one side, other side black/dark grey rough coating.

First and second picture attached is an image of the metal particles, third image is of the kidneys

Robert F Gerlach, VMD

Office of the State Veterinarian

5251 Dr. MLK Jr. Ave.

Anchorage, AK 99507

phone: 907-375-8214

fax: 907-929-7335



Photo 1—Necropsy #2



Photo 2—Necropsy #2



Photo 3—Necropsy #2

Lesser Sandhill Crane Colt #2—Necropsy

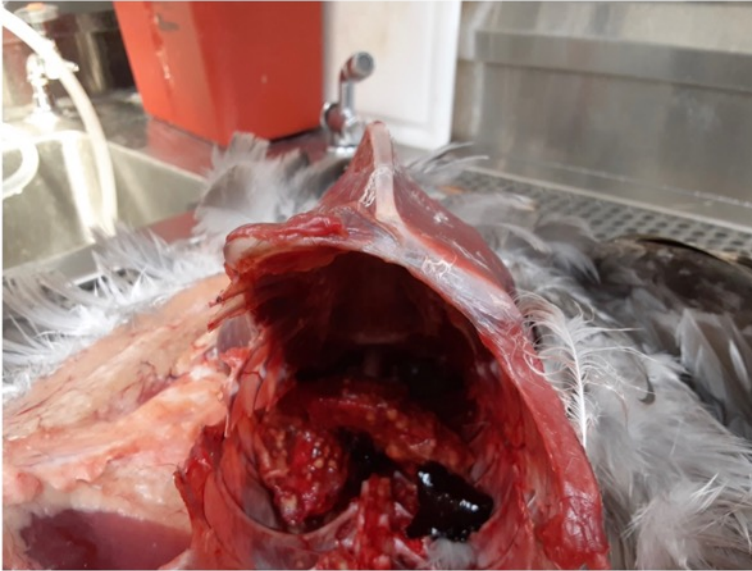


Necropsy Narrative, September 4, 2020

The crane colt weighed 5.6 pounds. It had some subcutaneous fat. On a pectoral muscle score from 0-3, I would call this bird a 0 to 1 (sternum easy to distinguish, muscle somewhat depressed). You may have a better sense of what the range of body conditions is for this type of bird. In a separate email I'll send photos from the side, looking down at the keel, and from the tail toward the head, to give you a sense of the body condition.

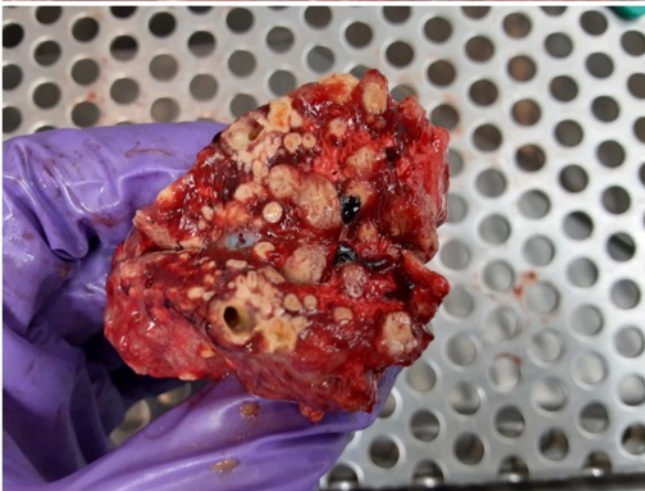
The gizzard mainly contained grit, and minimal food. Mild inflammation in the mucosa of the duodenum.



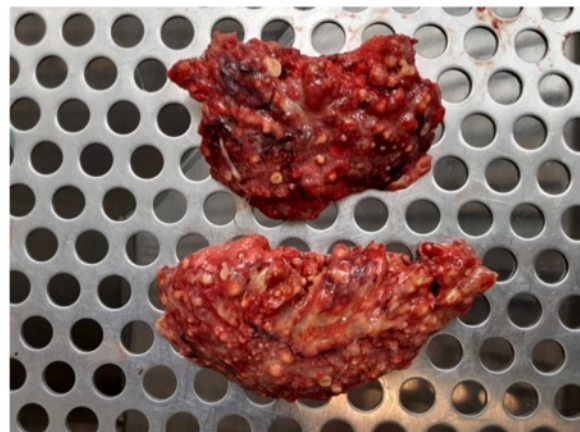
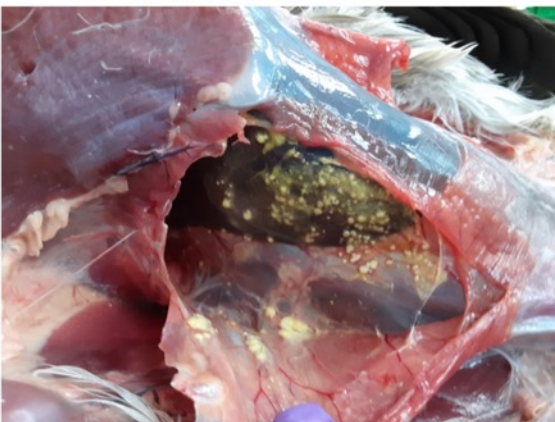


There were numerous white to yellow nodular lesions throughout the air sacs and the lungs.

The lesions are consistent with a fungal infection, likely *Aspergilla*.



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Lesser sandhill Crane Adult-- Necropsy #3- Date: 9.10.2020

Arrow is pointing to the puncture wound in the skin. There is some dried blood in the area. (Bird is in dorsal recumbency- on its back- oriented with head at top of photo and legs at the bottom).



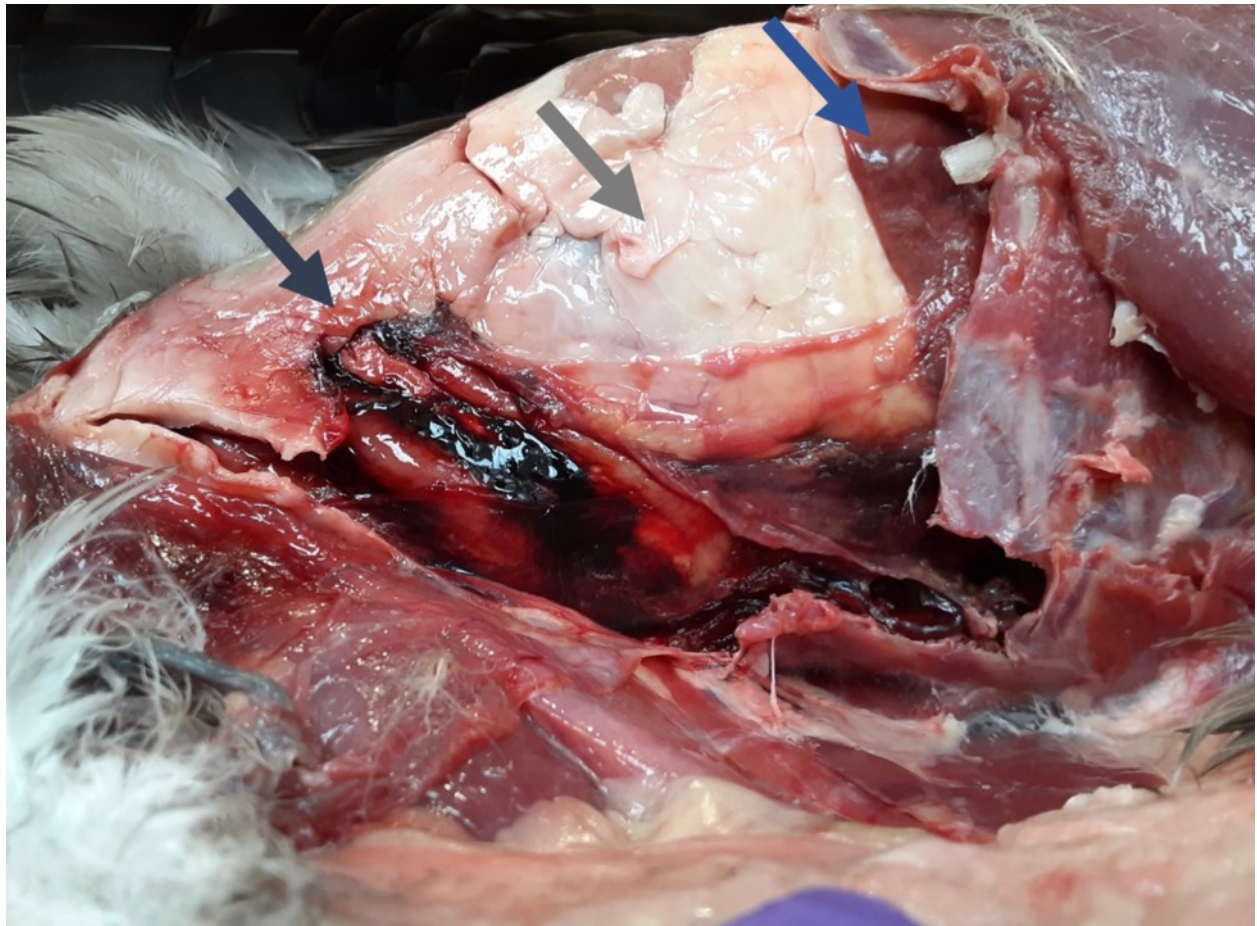
Arrow is pointing to puncture wound in the abdominal wall. Skin is retracted to the right side of the photo. Orientation- head at top of photo, legs at the bottom.



Abdominal wall is retracted. Arrow is pointing to the inner layer of the abdominal wall (the inside of the previous photo) with puncture and region of hemorrhage. (Oriented with head at top and legs at bottom.)



Bird is in dorsal recumbency. Side view of the left side of the abdomen. Oriented with head to the right and legs to the left. Dark arrow on the left is pointing to the general hemorrhage. For reference, the gray arrow is pointing to a layer of fat. Blue arrow is pointing to the liver.



Abdominal wall has been retracted, and fat layer removed. Photo shows the small intestinal hemorrhage.



Gizzard and small intestines have been removed. Blue arrow pointing to gizzard. Dark gray arrow pointing to perforation in small intestine. End of the scissors are through the perforation and in the small intestine.

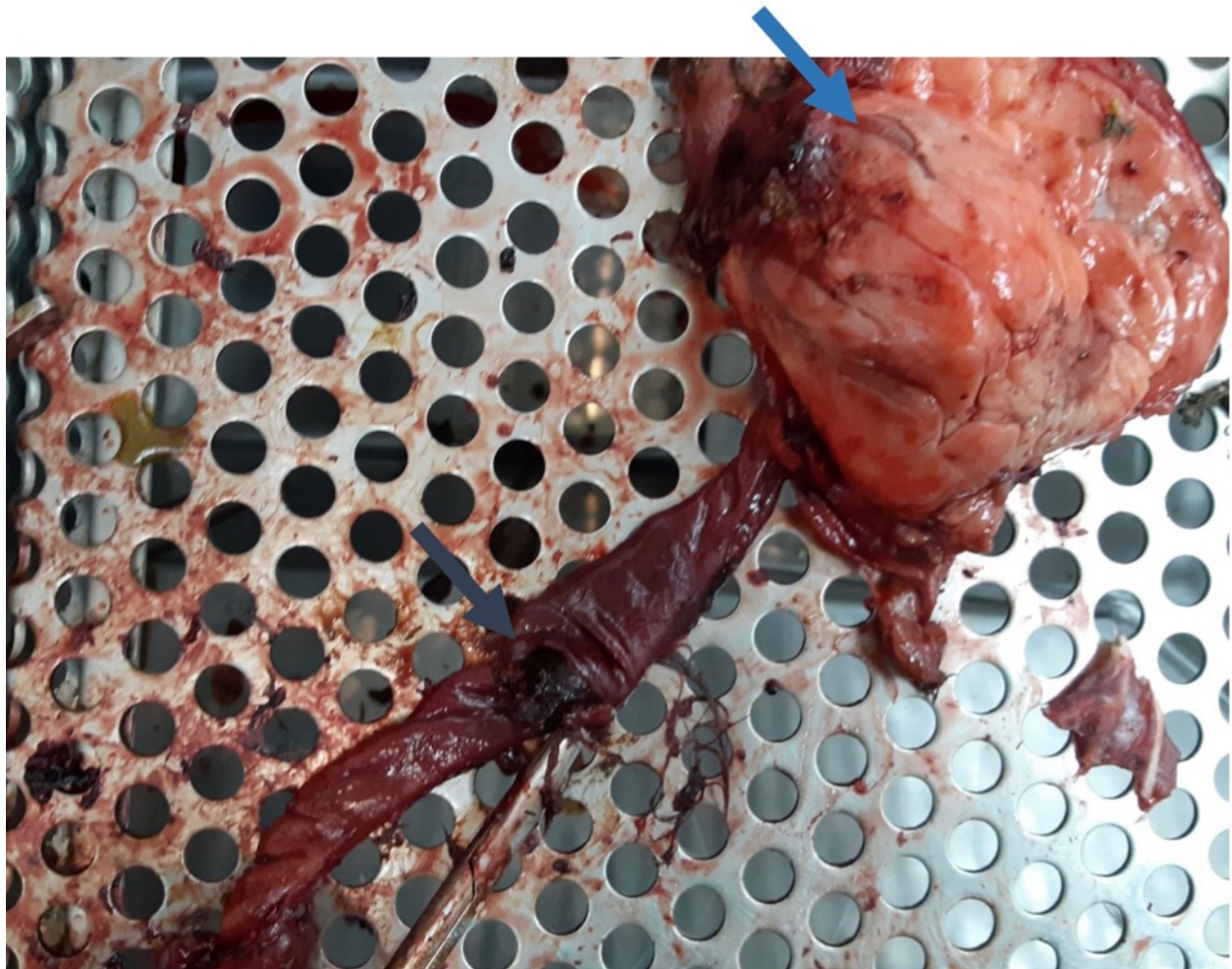


Photo shows the other big perforation through the small intestines. Tip of the scissors is in the perforation in the distal small intestine.



Pellet that was removed from the bird.

