

Family Break-Up in Shadow's Clan Families



Lily on the move after split with Faith, May 2012

It happens every May or June without fail, and to human beings, who tend to attach human emotions onto things, it sounds and looks like a cruel and heartbreaking occasion. But to bear families, it is a normal and necessary happening. The moms push the yearlings out of their lives for good, in favor of a far greater interest in finding a mate when they come into estrus when the yearlings are about 16-17 months old.

This means that in May or June of 2014, Eli and Ellie, whom we watched be born and grow up in 2013 and den with their mom Lily over the winter, will be shunned, shooed off and kicked out to fend for themselves. As awful as it seems to us, it is the way it is, and always has been, with bears.

However, the frightened young bears soon discover that Mom has prepared them well for living on their own. Once their initial confusion is overcome, they quickly begin developing confidence in themselves and become self-sufficient. Jewel and Juliet, excellent moms that they were to Herbie and Fern, and Sophie, Sybil and Sam, have another litter of

cubs now, to deal with in exactly the same way. And so the life cycle of the black bear continues.

Here is the official word from the North American Bear Center about family break-up as culled from several years of daily updates:

“Black bear mothers give birth in January and stay with their cubs for 16-17 months.

"Family bonds remain strong right up to the day of family breakup. In the days before family breakup, they play together, groom each other, sleep together, and suckle. Like human youngsters, yearling bears sleep very soundly, trusting their safety to the alertness of their mother.

“Family breakup happens suddenly during mating season in May or June when the mother is nearly ready to mate.

“The sudden presence of a male can precipitate family breakup. At first, the mother is torn between her yearlings and the persistent male, but within a day after family breakup, she will chase her yearlings away whenever she encounters them.

“Littermates also separate from each other. Each settles in a separate area within its mother’s territory. The mother then avoids those areas, giving the yearlings nearly exclusive feeding rights.

“Without their mothers, the yearlings are initially skittish, spending long periods up trees. They become covered with ticks. By the end of the summer, they develop into confident little bears. Most sons voluntarily leave within a couple years after family breakup. Most daughters eventually establish territories in or near their mother’s territory.”

There are numerous accounts of family break-up in the daily and yearly updates in the research files at the Wildlife Research Institute (WRI). One of the earliest says that “Juliet (age 4) demonstrated on multiple occasions how forcefully mother bears can enforce family breakup. She aggressively chased and treed her sons, Luke and Skywalker, on multiple occasions. When Luke followed her into the woods as she left the field station one day

we heard him bawl when she rebuffed his attempt to reconnect.” Fall 2007 Update

“Family breakup happens in different ways in different families and in different years. Sometimes, the mother comes into estrus, separates from her yearlings, and begins roaming—laying down scent trails for males to follow. In other cases, families may separate, reunite, and separate again permanently. Yearling Mickey decided to go off on his own a few days before Braveheart separated from her other 2 yearlings Dale and Chip. Many of you saw how June separated from Lily, Cal, and Bud in the ‘Bearwalker’ movie. She was very close with them until big handsome Harry showed up. The yearlings treed in fear and she went off with Harry.” April 27, 2010 Update



Braveheart on a mission just after her family break-up, 5/11/12

“RC was chasing her yearlings today--a sure sign family break-up has occurred. We’re hoping to see which male(s) she attracts now and if the potential father of her next litter will be one of the old favorites we know.” 5/30/11

“We are also recording how yearlings relate to one another after family break-up. Females usually split apart as Juliet’s yearlings Sharon and Shirley have done. Males are not as anti-social. They are not competing for territory like females are. In the Bearwalker film 3 yearling males from 2 litters teamed up to become the Three Amigos. We also remember June and Hazel, littermates, being antagonistic toward each other but either one was happy to hang out with their mellow brother Willy for brief periods. They couldn’t have too much mellow time, though, because the girls were staking out the land of their futures.” 6/2/11



The Four Amigos: Boy Named Sue (Juliet); Doug and Jim (RC); Ty (Bow)

“We don’t know how long it will continue, but the four amigos are still grouping in various combinations as they meet and greet and travel together to wrestle and perhaps provide extra eyes to look for danger. Yearlings are especially alert and cautious. Yearling females have a less carefree agenda as they try to carve out small parts of their mothers’ territories for their own. As playful as they are when still with their mothers,

they don't have much opportunity to play after family break-up. Occasionally, they will hook up with a male sibling to play briefly, but sisters become competitors for space after family break-up and there is nothing but tension when they meet." 6/17/11

"Lily and family are so close-knit with the mating season over here that it seems almost certain there will be no family break-up this year. Hope will get another 11 months of playing and foraging in the security of the family.

"In 2002, after family break-up in May, Dot got stern reminders from Mom Blackheart and Grandma Shadow to stay out of the way. The reminders included a bite on the foreleg. A couple weeks later, she moved out of their territories and remained in a small area where she was unusually cautious of danger. When we tried to join her to see how her leg was healing, she circled and circled out of sight before finally believing "It's me, bear." She never returned to Blackheart's and Shadow's territories." 11/19/11

"One of the data sets we're pulling together for a paper is 'family break-up'—the behaviors that lead to mothers and yearlings that have played and nursed for more than a year splitting apart. At family breakup, mothers split from their yearlings and the yearlings usually split from each other. We are finding, as with everything we have studied, that there is great variability in how this happens. With this being the year of mothers with yearlings, we had planned to boost our sample size for this kind of data by temporarily radio-collaring a number of yearlings to monitor during May and June. The data would have increased our sample size for publication. As part of the variability, all members of a family may split at once, yearlings may leave separately, mothers may leave and travel far outside their territory leaving scent trails for males to follow, or a male may join the family and force the mother to choose between him and her terrified yearlings as in the BBC documentary Bearwalker." 3/27/12



Lily and Faith on the day before family break-up

“Within hours after Lily’s family break-up on Monday sometime around midday, Lynn and a BBC camera crew checked on Faith. As expected, she had to take responsibility for her safety and was keenly interested in every little unidentified sound. It’s the kind of caution that drives some yearlings to spend windy days taking refuge in the tops of trees. Wind makes the forest sound like a rustling, dangerous place. Faith put safety ahead of food, spending minutes at a time on alert or walking to places where she could see better through the forest vegetation.”

“Lynn wanted to verify that she was okay. Mother bears can look ferocious going after yearlings and letting them know they are no longer welcome to hang out. We know of two yearlings that were bitten, including Lily as a yearling. How was Faith? Approaching yearlings newly on their own can be hard. They seem to have no confidence. We were lucky to find her on a rock ridge where she could evaluate us from a distance as we walked obliquely to her to avoid seeming too aggressive. She eventually believed

"It's me, bear" and came to Lynn as the BBC filmed. Lynn was able to examine her all over. There were no wounds and no areas that made her wince. She was okay."

"We located Faith's radio-signal today, but it took over an hour and 20 minutes of calling "It's me, bear" for her to cautiously approach. She relaxed as she ate the handful of nuts we brought, but ran as soon as we tried to follow her. We've never been able to walk with yearlings—and Faith is no exception."

"Today, Aspen is back being an accepted part of the family. The question is "Where has June's yearling male Aspen been since this picture was taken May 8?" We assumed family breakup was beginning because other families were breaking up at that time. His sister Aster stayed with their mother June, but we thought Aspen had split from the family for good. Once again the bears have proven us wrong."

"This is not the first time June's families have departed from what has been considered the norm for family breakup. The usual belief about family breakup is that it's a sudden breakup when all members of the family become independent and the mother increases her travel as she lays down scent trails. We're finding there is as great variation in this aspect of bear life as any other aspect."

"In 2006, June's yearling George spent 2 days as much as 2 miles from June and his brother Pete. He rejoined the family and they were together for 4 days before their final breakup. Five days later, George dispersed to an area 13 miles away."



June and Pete just before family break-up, 5/18/06

"In 2008, June's family breakup happened over the course of an hour or so. Big Harry arrived on the scene and the yearlings first climbed a tree but soon came down and fled."

"In 2010, June was seen without Jewel and she was being aggressive towards Jordan. Two days later, she was with Jewel but not Jordan. By the

end of the following day, June was alone. Will this year's final breakup for June's family be soon, as indicated by June's estrus condition? Or will she wait until Big Harry shows up as she did in Bearwalker in 2008 with the litter of Lily, Bud, and Cal? Big Harry is her mate of choice."

"One reason we're documenting family breakup is because there are so many ways it can happen. Most females in Shadow's clan have cubs in odd-numbered years—which means more yearlings and more family breakups the following spring. We are doing our best to monitor 10 mother-yearling families this year. Of these 10 families, 6 mothers are radio-collared—2 of which have a radio-collared yearling. We had hoped to collar at least one yearling in as many families as possible, but permit restrictions on the number of radio-collars make that impossible."

"A video of Lily taken within hours of her breakup with Faith on May 7 has been posted at <https://www.youtube.com/watch?v=6roHHkzqpCk>. This video is a bit different in that Lily was on the move – and so was the camera. You, too, can follow Lily through the woods as she straddles trees to leave her scent and carefully sniffs branches to pick up the scent of others". 5/18/12



Lily on a mission, 5/7/12

Well, we know what happened with Lily: she found her mate and subsequently had cubs Eli and Ellie on January 12, 2013! Faith safely denned in a remote area in a marsh and is now a candidate for motherhood in January 2014; whether she had cubs is still a question to be answered.