Another Development Threatens Red Deer's Wildlife Corridors, Water Quality and Waskasoo Park Trails

By Brenda Garrett

East Lincoln Properties has submitted another application to the City of Red Deer regarding the lot at 4240 59 St (between the Red Deer River and Gateway School on the road to KWNC.) The application is for a three storey, 47-unit, independent senior living apartment building located along 59 St.

The three-storey building on 59th St will impact the wildlife corridor along the river by adding traffic and by siting the building on the south-west corner of the lot. It will also impact water quality by generating significant run-off from concrete patios, asphalt, and the roof top. In addition, the proposed entrance along 45 Ave north of 59 St crosses the South Bank Trail, impacting both the wildlife corridor and trail safety as well as adding traffic to what is classified as a rural road used for park access.

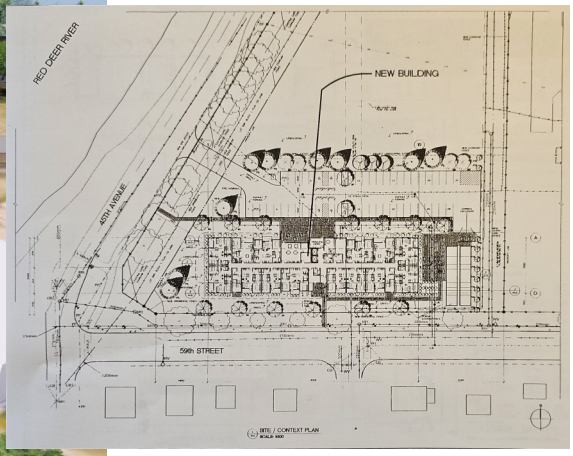
Finally, the application does not meet the requirements of the City of Red Deer Zoning Bylaw, particularly the Waskasoo Environmental Character Statement. The building is sited too close to 59th St, four mature specimen trees are to be removed, the landscape plan is short 28 trees and shrubs, and the building size is excessive for the area and will block views and vistas from the road.

In 2022, East Lincoln Properties applied to remove the lot from the Waskasoo Environmental Character Statement and rezone the property to high density residential to build a 120+ unit independent seniors apartment complex with two buildings: a four-storey building fronting the river and a building almost identical to this proposal along 59th St. City Council refused the application to rezone.

In 2023, Phase one of the City's Bylaw Review made independent senior living a discretionary use on Public Service land, resulting in this lot no longer needing to be rezoned for this use. Thus, the current application is for a development permit and goes before the Municipal Planning Commission for approval.

Because the proposed development replicates the 59th St building, access, and parking area in the developer's earlier application, it appears likely there will be a future application for the 4-storey building fronting 45th Ave and the Red Deer River.

The deadline to submit comments to the Municipal Planning Commission (MPC) is 4:00 pm on Nov. 14, 2025. Comments must be submitted by email to Jay Hallet at development@reddeer.ca. MPC will decide on the appropriateness of this development application on November 19 at 9:00 AM in Council Chambers.



Seasonal Sights and Sounds of Alberta with Dr. Sally Stuart
Bioacoustics, Bats and their uncertain Future

Recording bat vocalizations on our acreage since 2017 has been an obsession of mine. For a fascinating glimpse into the world of bats, I suggest watching the YouTube video "The Bats of Alberta, Documentary on Bats, Conservation and White Nose Syndrome."

Incredibly, approximately 25% of terrestrial mammals are bats. The International Union for Conservation of Nature (IUCN) (2001) claims that "of the 834 species of Microchiroptera (small, echolocating bats to which all nine Alberta bat species belong), approximately 22% are considered threatened and another 23% as near threatened". As of 2021 *Myotis lucifugus,* the Little Brown Bat has been classified as endangered.

Bats are unique as mammals because of their ability to fly. They have evolved anatomically and physiologically to have huge lung volumes and large hearts, especially when compared to non-flying mammals of a similar size. Their unique anatomy obviously includes their forelimb modification which enables wings for flight and somewhat unusual large ears and often oddly shaped noses. The latter adaptions are for hearing and sound production. Bat brains can detect pulse echo delays as small as 1ms, allowing them to calculate the distance between themselves and an obstacle. Bats can detect objects in the environment which are less than 0.5mm apart. They can determine the difference between the texture of objects and thus discriminate between different food items, for example a hairy moth versus the hard exoskeleton of a beetle.

The ability of microchiropteran bats to produce ultrasonic vocalizations (high frequency sounds above 20kHz) for navigation and finding food was only confirmed in the mid 1940s. This fascinating story began in 1793 when the Italian Lazzaro Spallanzani discovered, by a series of cruel and painful experiments, the inability of bats to orient themselves without the ability to hear. The Rev J. Wood (1869) "The Illustrated Natural History" realized that bats were able to navigate in the dark without the use of their eyes but suggested that scientists at that time were convinced that they were receiving sensory input when they flew via the thin membranous wing. He stated (referring to their navigational skills) that *The difficulty, however, seems to have been solved by the investigations which have been made into the formation of the bats wing, and it is now universally allowed, that to the exquisite nervous system of its wings the bat is indebted for the above-mentioned faculty*. This was by no means a ridiculous hypothesis as the wing surface is covered in sensory cells called Merkel cells (sensory receptors which detect air flow). In 1912, Hiram Maxim was convinced that infrasound (low frequency sounds) enabled bats to navigate. In the late 1930s, the invention of a microphone with the ability to detect high frequency sounds enabled Donald Griffin and Robert Galambos to finally solve the mystery and, in 1944, Donald Griffin coined the word "echolocation" (the ability of animals to emit sound waves and locate objects in the environment based on their returning echoes).

Nine species of Vespertilionidae (evening bats) occur in Alberta. Typically, these insect-eating bats start arriving in late April. After awakening from hibernation, they return to their summer roosts, they give birth and raise their young. They must take advantage of the short but abundant season when invertebrates are plentiful.

Five species of Alberta bats belong to the Genus Myotis, the best known of which is probably the Little Brown Bat, which are the first species to leave in the fall and are rarely recorded or seen after October. They head to their winter hibernaculum sites, some of which have been identified in the province as caves. However, most hibernaculum sites remain a mystery.

The last bats to leave are generally the larger ones, such as the Hoary and the Silver-haired, both of which migrate out of the province to warmer climates. Interestingly a study in 2006 by C. Lausen and R. Barclay found hibernation sites for *Eptesicus fuscus* (Big Brown bat) in deep rock crevices located in the southeast Red Deer River valley. The same study found that bats would occasionally awake and become active even at temperatures of -8 C. It is apparently not unusual for arousal to occur during hibernation. One hypothesis is that periodic urination eliminates toxic wastes and thus maintains homeostasis. The authors alternatively speculated that dehydration may initiative winter flights.

It is difficult to determine how abundant Albertan bats are, given that their nocturnal lifestyle means they are seldom seen and because ultrasonic vocalizations are not within human hearing range. These traits complicate monitoring.

Passive acoustic monitors, which record bat vocalizations as a series of pulses as the bats pass by the microphone. Software then attempts to identify the species, although ultrasonic vocalizations are notoriously inaccurate as a means of identifying them to the species level. However, these recordings do provide an indication of bat diversity and abundance.

2025 was the eighth year of recording bat acoustics on our acreage. Until this year, the trends (including the total number of recorded calls) were all remarkably similar. The majority of calls (approximately 20,000) between late April to early October were from Little Brown Bats or other Myotis species. Far fewer (about 3,000)were from the Hoary Bat.

On most years, bats called more or less continuously from dusk until dawn. The number of calls peak about mid-July, probably due to young bats becoming volant (able to fly). This year's data, although far from completely analyzed, began in early June with similar numbers of Little Brown Bats, but by mid-July, fewer than normal numbers were recorded. A complicating factor was this year's unusually cold weather. However, there are other reasons why bats might be declining, primarily from White-nose Syndrome. In an update published in October 2024, the Alberta government confirmed White-nose Syndrome had been found in two Little Brown Bats that were sampled in southeastern Alberta. Since then, I can find no further update. Larger bats such as the Hoary face their own challenges, more specifically wind turbines, which often kill them on their migration pathways.

The situation for bats is made worse by people's persecution of bats, due to a myriad of misconceptions. Fear of bats began with legends in the 18th century linking bats to the undead. However, the Victorians still enjoyed a close intimacy with wildlife, as illustrated by one story told by the Rev J. Wood (1869). He describes a young woman who had a pet bat which at night slept in her room sometimes fastened in her hair! Perhaps the publication in 1897 of the novel *Dracula* fueled the fear as the public associated bats with vampires and blood sucking. Zoonotic diseases (human diseases originating from animals) are a major concern and have augmented the fear of bats. It should be noted that transmission between bats and humans need to involve direct contact. Only experts should handle bats. It should be noted that people can also transmit diseases to bats.

Bats are vital components of a healthy ecosystem because they regulate insect (especially mosquito) populations. The changing climate is speculated to increase outbreaks of mosquito-borne diseases such as West Nile virus, and new diseases may emerge as different species of mosquitoes migrate with the warmer temperatures. Only further monitoring in 2026 will confirm if Little Brown Bats have actually declined and if this decline can be attributed to White-nose Syndrome.