Source: Ackerman, Diane. "In Praise of Bats." *The Moon by Whale Light*. NY: Vintage Books, 1992. 4-59.

One winter evening, I took a seat in a natural amphitheater of limestone boulders, at the bottom of which was the wide, dark mouth of Bracken Cave. Nothing stirred yet in its depths. But I had been promised one of the wonders of our age. Deep inside the cavern, Mexican free-tailed bats were hanging up by their toes, twenty million of them. They were the largest concentration of warm-blooded animals in the world. At dusk, all twenty million would fly out to feed, in a living volcano scientists called an emergence. They would flow into the sky with their leathery wings and ultrasonic cries, and people fifty miles away, in cities like San Antonio and Austin, would, without realizing it, rarely be more than seventy feet from a feeding bat.

Shadows marched through the trees as the whirpooling bats set off on a night's cross-country journey, to forage for food. A natural pesticide, they eat 150 tons of insects every night. Born in June, then weaned when they were about five weeks old, the new babies were strong enough to fly with their mothers, who had taught them some of the arcane arts of *bathood*: how to leave a cave waltzing and veer off into the twilight; how to be guided by the land and feed in midair; how to swoop down to a pond with their small pink tongues out and drink on the wing; how to find the warmth they crave among the huddled massed; how to rely on the mob-law the colony. Did they fly nonstop all night long, or did they pause somewhere to put their feet up for a spell? Did the mothers demonstrate for their own offspring, the way bird mothers do, or did the babies learn from studying the habits of the whole colony? "Probably they break off into recognizable groups that understand where they're headed," [my guide] said. "But we just don't know. So little is know about bats."

Texas sky. A second column formed, undulating and dancing through the air like a Chinese dragon, stretching for miles, headed for some unknown feeding ground. The night was silent except for the serene beating of their wings. But when Tuttle switched on his mini-bat-detector, we heard a frenzy of clicks. Beyond human hearing, the air was loud with shouts as the teeming bats fluttered wing to wing, echolocating furiously so as not to collide. Like a Geiger counter gone berserk, the bat -detector poured static and Tuttle laughed. There was no way to hear individual voices in the ultrasonic mayhem of the emergence. Such a gust of bats flowed upward that two new columns formed, each thick and beating, making long pulsing ribbons, climbing two miles high to ride rapid air currents toward distant feeding sites. Some groups twisted into a bow shape, others into a tuning fork, then a claw, a wrench, a

waving hand. Buffeted by uneven currents, they made the air visible, as it rarely is. In the rosy dusk, their wings beat so fast that a strobe light seems to be playing over them.

A hawk appeared, swooped, grabbed a bat straight out of the sky, and disappeared with it. In a moment, the hawk returned, but hearing his wings coming, the bats shifted sideways to confuse him, and he missed. As wave upon wave of bats poured out of the cave, their collective wings began to sound like drizzle on autumn leaves. Gushing out and swirling fast in this living Mixmaster, newly risen bats started in close and then veered out almost to the rim of the bowl, climbing until they were high enough to clear the ridge. Already a long black column of bats looked like a tornado spinning out far across the

At dinnertime, Tuttle and I tried the patio of the Four Seasons Hotel downtown, on the Colorado River, a few blocks from the pink-granite capitol building and right across from the Congress Avenue Bridge. We had not come for the margaritas or the lobster enchiladas but to watch an emergence as dazzling as the one we had seen at Bracken Cave. Tucked inside the crevices under the bridge were three quarters of a million bachelor free-tailed bats. They made Austin the summer home of the largest urban bat population in the world. As the sum ladled thick pastels into the river, two crew boats pulled gently, side by side. Could they see the bats when they passed under the bridge, I wondered? Sweethearts had begun to stroll across the bridge hand in hand, waiting for the emergence. Sodium lights from the Hyatt Hotel cast a trail of copper coins across the water. Suddenly smoke billowed from underneath the bridge. No, not smoke, but a column of bats. Then two columns soared high and flew in parallel, like the long black reins of an invisible sleigh. Bats kept surging out, and soon, four columns stretched miles across the sky. A few strays looped and fed near us, passing like shuttles through the weave of trees. The night was noticeably free from insects, but that was no surprise. These bats would each five thousand pounds of insects that one night alone.

In a medieval simile of Venerable Bede's, life is depicted as a beautiful and strange winged creature that appears at a window, flies swiftly through the half-lit banquet hall, and is gone. That seems about right for a vision of creation as beautiful as this one was, which soon included the city lights, the sunset doing a shadow dance over the water, and four columns of bats undulating across the sky.

In Praise of Bats by Diane Ackerman

Central Idea:	
Evidence from passage to support central idea	Commentary/Extension of ideas







<u>Bat #1</u> <u>Bat #2</u> <u>Bat #3</u>







<u>Bat #4</u> <u>Bat #5</u> <u>Bat #6</u>