

Wolves Are Not Howling at the Moon, So Why Are They Howling?

What is a howl?

Howls are relatively low-pitched, long vocalizations that are emitted by single wolves or several wolves simultaneously as a chorus howl (Harrington & Asa, 2003). Wolves use howling as a form of long-distance communication to communicate with their packmates and other wolves in distant packs (Theberge & Falls, 1967; Harrington & Asa, 2003).



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Variability Within Howls

A study by Theberge & Falls (1967) showed that individual wolves all howl slightly differently. Howls can differ in ways such as differences in the lowest or highest note, and preferences for smooth or abrupt pitch changes (Theberge & Falls, 1967). Wolves can tell individual howls apart and use this to recognize one another (Palacios et al., 2015; Watson et al., 2018).

Howling Within Packs

Wolves howl to communicate with their pack mates so that they can locate one another (Mazzini et al., 2013). Theberge & Falls' (1967) study showed that wolves howl more frequently when they do not know where their packmates are. Factors such as social rank, affiliative relationships and age can influence the frequency of howling used to reunite with isolated individuals (Mazzini et al., 2013; Ausband et al., 2020).

Pups

Older pups (between the ages of 16-18 weeks old, are more likely to respond to howls from adults wolves in their packs compared to younger pups (Ausband et al., 2020). Older pups are more likely to howl because they are hoping adults are bringing them food (Ausband et al., 2020).



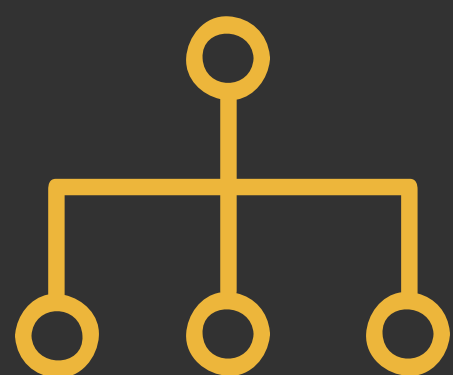
"Mexican wolf pup howling" by USFWS Headquarters is licensed under CC BY 2.0

Affiliative Relationships

Wolves howl more frequently when they do not know where individuals are with which they have strong bonds (Mazzini et al., 2013). Mazzini et al. (2013) found that howling in this circumstance was not triggered by stress; instead, it was under cognitive control.

Social Rank

Wolves howl more frequently when separated from individuals with a higher social ranking than lower-ranked individuals (Mazzini et al., 2013). This increase in howl frequency is associated with higher stress levels, suggesting that stress triggers howling when separated from leading individuals in their pack (Mazzini et al., 2013).



Howling Among Packs

Territory Maintenance

Howling is used among packs to warn other groups of occupied territory since interactions between unfamiliar wolves lead to deadly conflicts (Harrington & Mech, 1979; Harrington, 1987). When encounters occur between unfamiliar wolves, they will often use a lower-pitched howl to convey their hostility and competitive abilities (Harrington, 1987).

Pack Size

Wolves that are a part of large packs are more confident that they will not be attacked by other animals or other wolves, so they are more likely to elicit loud howls compared to solitary wolves or wolves that are a part of small packs (Harrington & Mech, 1987; Palacios et al., 2015).



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