

IDFG and OSC SCNF SCC Bat Recommendations 6/29/2018

Bats	FOREST/REGION Recommendation as SCC	IDFG & OSC Recommendation as SCC	SGCN Tier	Justification for Recommendation
Big Brown Bat	Yes	No	Not a SGCN	<ul style="list-style-type: none"> • G5S3—note: in the 2017 review of the conservation status of North American bats by Hammerson et al., this species’ global conservation status (G5) has remained stable over the past 30 years. • Big Brown Bat is confirmed for white-nose syndrome (WNS) in the endemic zone but has not experienced the same level of population declines as species such as Little Brown Myotis. In Idaho, few hibernacula records exist for this species and it does not appear to hibernate in large aggregations like Townsend’s Big-eared Bat or Western Small-footed Myotis. In addition, Big Brown Bat typically gives birth to twins, as opposed to the single pup that most Myotis species produce each year, which suggests that, from a population perspective, this species probably has a better chance of recovery when it does experience any kind of decline. For these reasons, presumably, if WNS spreads to Idaho, the potential threat to Big Brown Bat persistence, compared to other bat species in the state, is probably not going to be as severe. • Relative to threats unrelated to the SCNF, Big Brown Bat, like Hoary and Silver-haired bats, is also threatened by wind energy, but not at the same severity as Hoary and Silver-haired. Big Brown Bat is not migratory and therefore wind energy effects to Big Brown Bats in Idaho are more localized and so are not as widespread and pervasive as for the migratory Hoary and Silver-haired bats (which because of their migratory behavior, most of the population could potentially be exposed to the threat of wind energy as they move south in the fall or north in the spring). • Status of the species in Idaho and range wide does not indicate substantial concern for persistence on the forest or across its range. • In the 2015 BLM survey, IDFG documented 285 occurrences of Big Brown Bat at 39 of 79 (49%) survey sites. Most sites had <10 occurrences per site, with just a few having >10 to 85. Based on this, IDFG would say the species is widespread, and perhaps “common.” IDFG would expect the species to be more common on the forest, compared to BLM rangelands. • Big Brown Bat often forms large maternity colonies in human structures, and one of the primary threats to the species is human disturbance (as well as direct mortality) due to pest control activities in human structures, which is not influenced by SCNF action unless in SCNF structures.

Silver-haired Bat	Yes	Yes	T2	<ul style="list-style-type: none"> G3G4S3 (rounded Global Status: G3)—note that the current global rank for Silver-haired Bat (G3G4) was updated by NatureServe in 2015 but not published until 2017 (Hammerson et al. 2017), and thus not yet reflected in the Idaho SWAP; this status reflects suspected population declines, negative effects of deforestation and forest management practices that reduce roost site (e.g., snag) availability and habitat quality (e.g., forest structure and composition), and questionable ability of the species to persist given current and anticipated levels of wind energy development and its impacts on this species' populations. Although the primary threat to Silver-haired Bat is wind energy, because this species is a tree-roosting bat, it would benefit from forest management that focuses on providing roosting and foraging habitat. In addition, recent evidence in Idaho of a hibernating Silver-haired Bat in an abandoned mine suggests that this species would likewise benefit from well-managed abandoned mine lands programs. Finally, Silver-haired Bat has been diagnosed positive for <i>Pseudogymnoascus destructans</i> (<i>Pd</i>), the fungus that causes WNS, but has not yet been confirmed for the disease.
Townsend's Big-eared Bat	Yes	Yes	T3	<ul style="list-style-type: none"> G4S3—note: in the 2017 review of the conservation status of North American bats by Hammerson et al., this species' global conservation status was changed from G3G4 to G4, and thus not yet reflected in the Idaho SWAP; however, the western subspecies of Townsend's Big-eared Bat, <i>townsendii</i>, remains G3G4. This species remains a high priority for conservation across the West as evidenced by the Western Association of Fish and Wildlife Agencies' MOU among western states. This species has been diagnosed positive for <i>Pd</i> within the WNS area and is known to aggregate in hibernacula during the winter in mines and caves making it more intrinsically vulnerable. Idaho has the largest known hibernaculum for this species in the West. Based on the FS SCC planning rule directives (e.g., FSH 1909.12.52), IDFG's best available information indicates that considerations such as "significant threats to populations or habitat from stressors on and off the plan area" and "restricted ranges" (in the context of Townsend's Big-eared Bat's restricted range during the winter when it hibernates in discrete locations), both apply to this species. In the "Species Conservation Assessment and Conservation Strategy for the Townsend's Big-Eared Bat," (Pierson et al. (1999) cite timber harvest practices as affecting both roosting and foraging habitat for this species ranging from temporary displacement to elimination of potential roost sites. Similarly, abandoned mine lands closures have the potential to affect this species through the loss of suitable roosting habitat as well as the direct loss

				<p>of bats if bats aren't excluded prior to destructive closures. Pierson et al. (1999) suggest that the cumulative effects of closing many small roosts as well as a few large roosts may affect this species at a population level. Both timber harvest and abandoned mine lands closures are relevant to the forest plan area and thus the SCNF has the potential to positively affect conservation of this species through beneficial forest management practices and proper planning and implementation of abandoned mine lands programs.</p>
Hoary Bat	Yes	Yes	T2	<ul style="list-style-type: none"> G3G4S3 (rounded Global Status: G3)—note that the current global rank for Hoary Bat was updated by NatureServe from G5 to G3G4 in 2015 but not published until 2017 (Hammerson et al. 2017), and thus not yet reflected in the Idaho SWAP; this status reflects the uncertain level of population impact of wind energy fatalities as well as poorly known population size and trend in South America); Hoary Bat is a high conservation priority right now primarily because of threats from wind energy; however, because this is a foliage-roosting bat that occurs in many forest types (including cottonwood riparian zones and juniper woodlands) so this is a species that could directly benefit from forest/woodland management that maintains quality roosting habitat for the species; the Idaho SWAP lists this species as a high priority for conservation. A recent peer-reviewed paper by Frick et al. (2017) predicted that the Hoary Bat population could decline by as much as 90% in the next 50 years, primarily due to mortality associated with wind energy.
California Myotis	Yes	No	Not a SGCN	<ul style="list-style-type: none"> G5S3—note: in the 2017 review of the conservation status of North American bats by Hammerson et al., this species' global conservation status (G5) has remained stable over the past 30 years. IDFG sampled acoustic detections of California Myotis (MYCA) across the study area. Of 76 sites sampled (across 19 spatially-balanced watershed groupings), IDFG detected this species at 31 sites (41%). IDFG impression is that they are widely distributed, but not numerous at any one site. No. of detections per 4-night sampling period ranged from 1 to 132, with a mean of 17 and median of 4. Areas detected include the Beaverheads (Kirtley Creek, Geertson Creek, Yearian Creek, Warm Springs); Hat Creek; lower Pahsimeroi; Middle East Fk Salmon; Lemhi Range (Muddy–Mulkey Creeks); Salmon River Corridor (Camp Creek/Waddington Creek); Big Lost River; and

				<p>Slate Creek. IDFG also detected this species on surveys outside the sampling framework: 1 night survey on Williams Lake (364 calls); on a North American Bat survey cell 1569 in Iron Creek (1 call); at several stations along the Middle Fork Salmon River (58 calls); and at the Waterbury–Keegan residence in Baker (15 calls). IDFG has high confidence in our call identification for this survey effort. IDFG had Idaho’s renowned bat expert Bill Doering complete the call analysis. These findings should result in minor extensions of the species’ range in Idaho and the western US based on occurrence on adjacent BLM lands, MYCA likely occurs on the Leadore, Challis–Yankee Fork and Lost River Ranger Districts.</p> <ul style="list-style-type: none"> The two leading causes of multiple mortality events in bats globally are collisions with wind turbines and WNS (O’Shea et al. 2016). In addition to these, other primary threats to Idaho bat species include mine closures, human disturbance, and pest control. Given the status of <i>Myotis californicus</i> (MYCA) in Idaho and range wide, that this species does not form large hibernating or maternity colonies, and does not appear to be impacted by wind energy in Idaho, substantial concern for the species’ persistence on the forest or across its range is not indicated.
Western Small-footed Myotis	Yes	Yes but alternative consideration, see 2nd bullet	T3	<ul style="list-style-type: none"> G5S3—note that the current global conservation status rank for this species was updated by NatureServe in 2015 but not published until 2017 (Hammerson et al. 2017), and thus not yet reflected in the Idaho SWAP; In May 2018, a Western Small-footed Myotis from South Dakota was diagnosed as positive for <i>Pd</i>, but so far, no diagnostic signs of WNS have been documented. In June 2018, <i>Pd</i> was detected further west in se. Wyoming on a Little Brown Myotis, which suggests that the disease will continue to spread west. IDFG does not yet know whether Western Small-footed Myotis will be negatively impacted by WNS should the disease spread to Idaho. However, given this species’ proclivity to hibernate in subterranean environments, it has the potential to be negatively impacted by the disease. Because IDFG can’t currently determine if WNS will spread to Idaho or how it would impact this species on the Forest, alternative to SCC could be a targeted plan component addressing USFS commitments to the Idaho WNS Interagency Response Plan (in progress) and the National WNS Response Plan for this species.

Long-eared Myotis	Yes	No	Not a SGCN	<ul style="list-style-type: none"> G5S3—note that the current global conservation status rank for this species was updated by NatureServe in 2015 but not published until 2017 (Hammerson et al. 2017), and thus not yet reflected in the Idaho SWAP; Long-eared Myotis (MYEV) results for the East-Central Idaho Bat Survey, MYEV was detected in 53 of 76 (70%) of sites sampled. Mean number of MYEV detections per 4-night session was 13 and median number of detections/4-night session across all survey sites was 6. MYEV occurred across the study area from Beaverheads to Birch Creek to Big Lost, Salmon River Corridor, Lemhi Range, Pahsimeroi, East Fork Salmon, and Slate Creek. Based on occurrence reports by the Idaho Fish and Wildlife Information System, USFS Natural Resources Information System, this species occurs widely throughout the Forest. Observations have been recorded between 1996 and 2009 across 5 of the 6 ranger districts on the SCNF, with the highest abundances recorded in the North Fork, Salmon–Cobalt, and Lost River ranger districts. See rationale for California Myotis; based on the status of the species in Idaho and range wide, IDFG does not recommend this species for listing as an SCC.
Little Brown Myotis	Yes	Yes but alternative consideration, see 2nd bullet	T3	<ul style="list-style-type: none"> G3S3—note: NatureServe updated the global conservation status rank of this species from G5 to G3 in 2014 primarily due to the impacts of white-nose syndrome (WNS) and wind energy. The Little Brown Myotis has experienced severe population declines within the endemic area for WNS. Although not yet detected in Idaho, WNS was confirmed in Washington in 2016 and is predicted to spread to Idaho and other western states (<i>Pd</i> was recently detected in both South Dakota and se. Wyoming); this species would benefit from promoting good practices when managing buildings where bats have established maternity colonies. Because IDFG can't currently determine if WNS will spread to Idaho or how it would impact this species on the Forest, alternative to SCC may be plan components addressing structure management where maternity colonies are located and addressing USFS commitments to the Idaho WNS Interagency Response Plan (in progress) and the National WNS Response Plan for this species.
Fringed Myotis	Yes	No	Not a SGCN	<ul style="list-style-type: none"> G4S3—note: in the 2017 review of the conservation status of North American bats by Hammerson et al., this species' global conservation status (G4) has remained stable over the past 30 years. Based on available data, this species is one of the rarest bats in Idaho and is inherently rare throughout its range. Even when encountered, it is usually a single individual and not typically found in aggregations. In addition, IDFG has no hibernacula records for this species, which suggests that the species

				is likely using winter roost sites that are not in caves or mines. Moreover, this species is not found in large colonies. For these reasons, the potential impact of WNS is probably not as significant as it would be to species known to regularly hibernate in subterranean environments (e.g., Little Brown Myotis, Western Small-footed Myotis). At this time, IDFG is unable to demonstrate a substantial concern about persistence of this species on the forest.
Long-legged Myotis	Yes	No	Not a SGCN	<ul style="list-style-type: none"> G4G5S3—note: in the 2017 review of the conservation status of North American bats by Hammerson et al., this species' global conservation status (G4G5) has remained stable over the past 30 years. See rationale for California Myotis; based on the status of the species in Idaho and range wide, IDFG does not recommend this species for listing as an SCC.
Yuma Myotis	Yes	Yes but alternative consideration, see 2nd bullet	Not a SGCN but may be added in the near future	<ul style="list-style-type: none"> G5S3—note that the current global conservation status rank for this species was updated by NatureServe in 2015 but not published until 2017 (Hammerson et al. 2017), and thus not yet reflected in the Idaho SWAP. Since IDFG revised the Idaho State Wildlife Action Plan, Yuma Myotis has been added to the list of confirmed species for WNS (from Washington bat); this species would benefit from promoting good practices when managing USFS structures (e.g., cabins, buildings) where bats have established maternity colonies. In the East, bats infected with WNS often returned early to their maternity colonies. Therefore, one strategy that can be used in the West is to monitor known maternity colonies, especially over the winter, for evidence of WNS. Because IDFG can't currently determine if WNS will spread to Idaho or how it would impact this species on the Forest, alternative to SCC may be plan components addressing structure management where maternity colonies are located and addressing USFS commitments to the Idaho WNS Interagency Response Plan (in progress) and the National WNS Response Plan for this species.

References

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