

**Supplementary Material:**  
**Body condition of gray whales (*Eschrichtius robustus*) feeding on the Pacific Coast reflects local and basin-wide environmental drivers and biological parameters**

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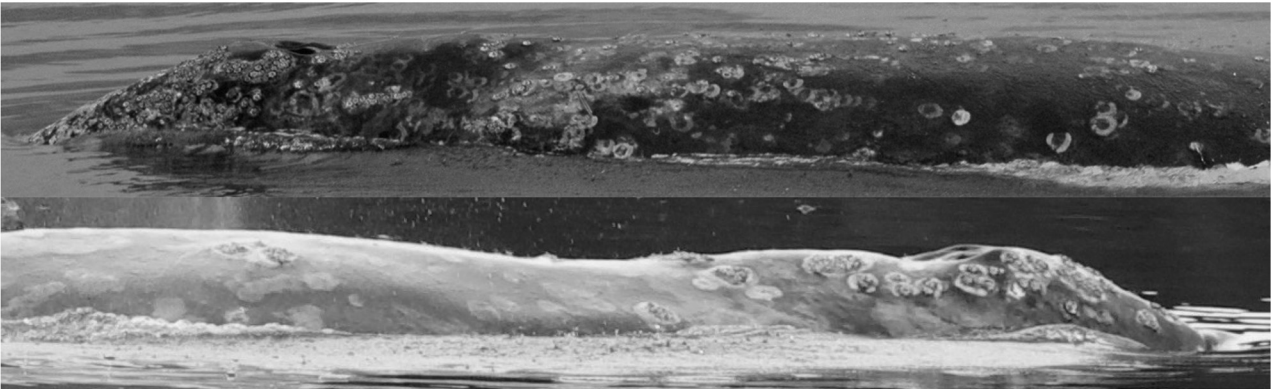
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## Supplement I

(a) Good post-cranial condition (score 3)



(b) Fair post-cranial condition (score 2)

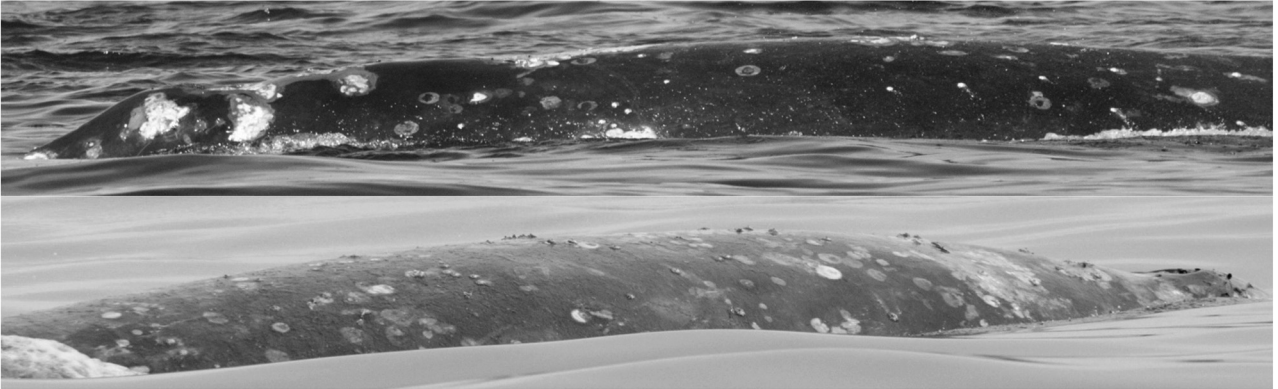


(c) Poor post-cranial condition (score 1)

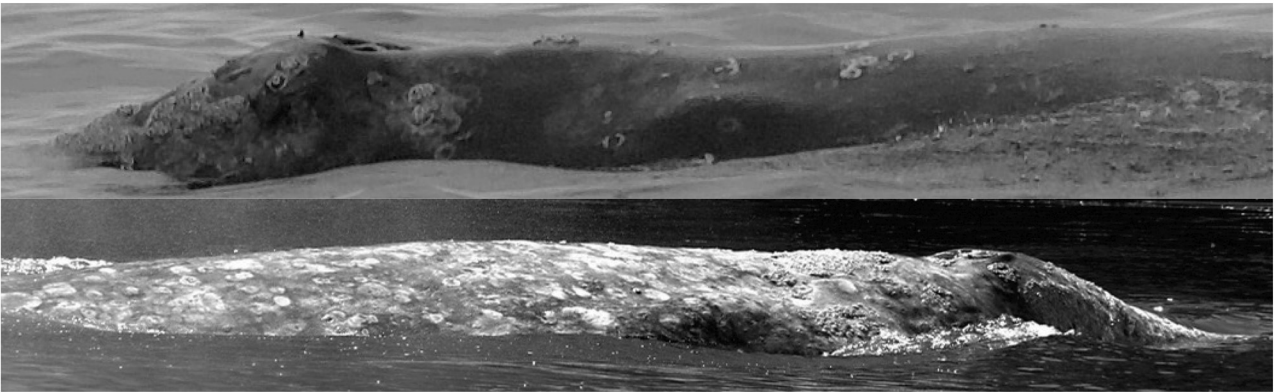


Supp. Fig. 1. – Following methods developed by Bradford *et al.* (2012), the post-cranial region of Pacific Coast Feed Group gray whales (*Eschrichtius robustus*) was scored (a) in good condition (score 3) when the area from the blowholes to the posterior cranial was flat or rounded and no visible post-cranial concavity was observed, (b) in fair condition (score 2) when a slight to moderate post-cranial concavity was observed, and (c) in poor condition (score 1) when severe post-cranial concavity was observed such that a convex, raised hump was visible behind the blowholes. The post-cranial region was scored shortly after a whale's surfacing when the region from the blowholes to the start of the dorsal ridge is approximately parallel to the water to avoid misinterpretation of a concavity or convexity based on the whale's body position, e.g. lifting or dropping the head.

(a) Good scapular condition (score 2)



(b) Poor scapular condition (score 1)



Supp. Fig. 2. – Following methods developed by Bradford *et al.* (2012), the scapular region of Pacific Coast Feed Group gray whales (*Eschrichtius robustus*) were scored (a) in good condition (score 2) when no visible protrusion of the scapula with rounded body in the scapular region was observed and (b) in poor condition (score 1) when a visible subdermal protrusion of the scapula was observed. The scapular region was scored following the surfacing event while the blowholes (whether or not visible in the frame) were still out of the water or just after they were lowered such that the back was approximately parallel to the water and not arched into a dive to avoid misinterpretation based on the whale's body position.

(a) Good lateral condition (score 2)



(b) Poor lateral condition (score 1)



Supp. Fig. 3. – Following methods developed by Bradford *et al.* (2012), the lateral flank region of Pacific Coast Feed Group gray whales (*Eschrichtius robustus*) were scored (a) in good condition (score 2) if rounded from the post-cranial region to the start of the dorsal ridge and (b) in poor condition (score 1) when the whale had an obvious depression along the dorsal aspect of the lateral flank beginning midway between the post-cranial region and start of the dorsal ridge. The lateral flank region was scored following the surfacing event when the blowholes (whether or not visible in the frame) were still out of the water or just after they were lowered such that the back was approximately parallel to the water and not arched into a dive to avoid misinterpretation of a concavity or convexity based on the whale's body position; e.g. flexing.