

Biology Essentials - 019



Tardigrade



Response to External Environments

Environment

Response

Behavioral

Physiological

Animals

Humans

Hibernation

Migration

Shivering

Sweating

Torpor



Hibernation

Behavioral Response



Bar-tailed Godwit

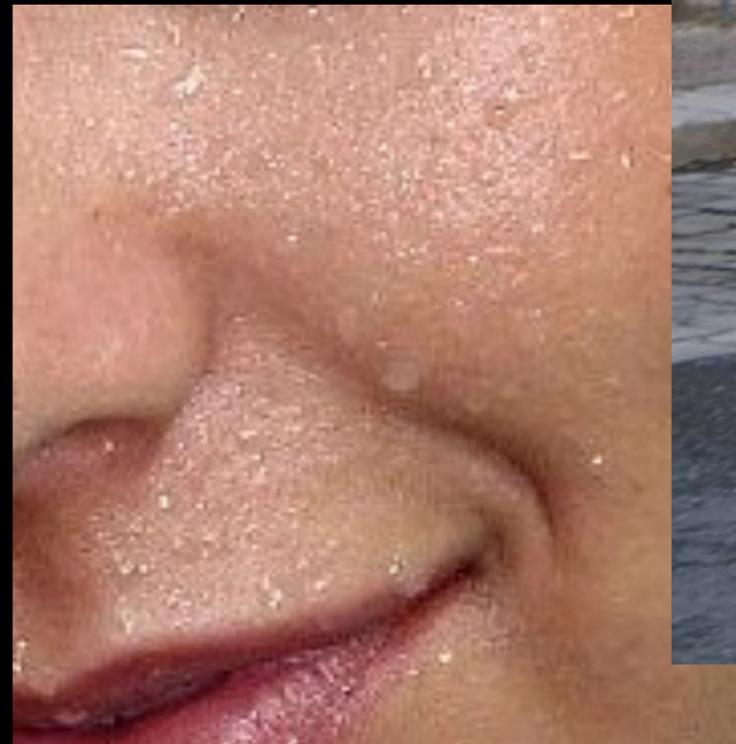


Migration

Physiological Response



Shivering
and
Sweating



Acknowledgements

Alexxx86. *English: Haile Gebrselassie at Vienna City Marathon 2011*, April 17, 2011. Own work. [http://commons.wikimedia.org/wiki/](http://commons.wikimedia.org/wiki/File:Haile_Gebrselassie_at_Vienna_City_Marathon_2011.jpg)

[File:Haile_Gebrselassie_at_Vienna_City_Marathon_2011.jpg](http://commons.wikimedia.org/wiki/File:Haile_Gebrselassie_at_Vienna_City_Marathon_2011.jpg).

“[File:2003-09-17 Goose Bumps.jpg](http://en.wikipedia.org/wiki/File:2003-09-17_Goose_bumps.jpg).” *Wikipedia, the Free Encyclopedia*. Accessed November 17, 2013. http://en.wikipedia.org/wiki/File:2003-09-17_Goose_bumps.jpg.

“[File:Amanda Françoço At The Runner Sports Fragment.jpg](http://simple.wikipedia.org/wiki/File:Amanda_Fran%C3%A7ozo_At_The_Runner_Sports_Fragment.jpg).” *Simple English Wikipedia, the Free Encyclopedia*. Accessed November 17, 2013. [http://simple.wikipedia.org/wiki/](http://simple.wikipedia.org/wiki/File:Amanda_Fran%C3%A7ozo_At_The_Runner_Sports_Fragment.jpg)

[File:Amanda_Françoço At The Runner Sports Fragment.jpg](http://simple.wikipedia.org/wiki/File:Amanda_Fran%C3%A7ozo_At_The_Runner_Sports_Fragment.jpg).

“[File:Bar-Tailed Godwit Migration.jpg](http://en.wikipedia.org/wiki/File:Bar-tailed_Godwit_migration.jpg).” *Wikipedia, the Free Encyclopedia*. Accessed November 17, 2013. http://en.wikipedia.org/wiki/File:Bar-tailed_Godwit_migration.jpg.

“[File: Bear Hibernating.jpg](http://en.wikipedia.org/wiki/File:Bear_hibernating.jpg).” *Wikipedia, the Free Encyclopedia*. Accessed November 17, 2013. [http://en.wikipedia.org/wiki/File: Bear_hibernating.jpg](http://en.wikipedia.org/wiki/File:Bear_hibernating.jpg).

“[File:Groundhog3.jpg](http://en.wikipedia.org/wiki/File:Groundhog3.jpg).” *Wikipedia, the Free Encyclopedia*. Accessed November 17, 2013. <http://en.wikipedia.org/wiki/File:Groundhog3.jpg>.

“[File:Napoleons Retreat from Moscow.jpg](http://en.wikipedia.org/wiki/File:Napoleons_retreat_from_moscow.jpg).” *Wikipedia, the Free Encyclopedia*. Accessed November 17, 2013. http://en.wikipedia.org/wiki/File:Napoleons_retreat_from_moscow.jpg.

“[File:Waterbear.jpg](http://en.wikipedia.org/wiki/File:Waterbear.jpg).” *Wikipedia, the Free Encyclopedia*. Accessed November 17, 2013. <http://en.wikipedia.org/wiki/File:Waterbear.jpg>.

File:Worm and Water Bear.jpg, n.d. http://creationwiki.org/File:Worm_and_water_bear.jpg.

“[Payl:Aphantochroa cirrochloris-3.jpg](http://ceb.wikipedia.org/wiki/Payl:Aphantochroa_cirrochloris-3.jpg).” *Wikipedia*. Accessed November 17, 2013. http://ceb.wikipedia.org/wiki/Payl:Aphantochroa_cirrochloris-3.jpg.

Service, Maslowski, Steve-U. S. Fish and Wildlife. *English: Bar-Tailed Godwit (Limosa Lapponica) on Tundra*, December 20, 2005. [http://www.fws.gov/digitalmedia/FullRes/natdiglib/](http://www.fws.gov/digitalmedia/FullRes/natdiglib/3465.jpg)

[3465.jpg](http://commons.wikimedia.org/wiki/File:Bar-Tailed_Godwit_on_Tundra.jpg). http://commons.wikimedia.org/wiki/File:Bar-Tailed_Godwit_on_Tundra.jpg.



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