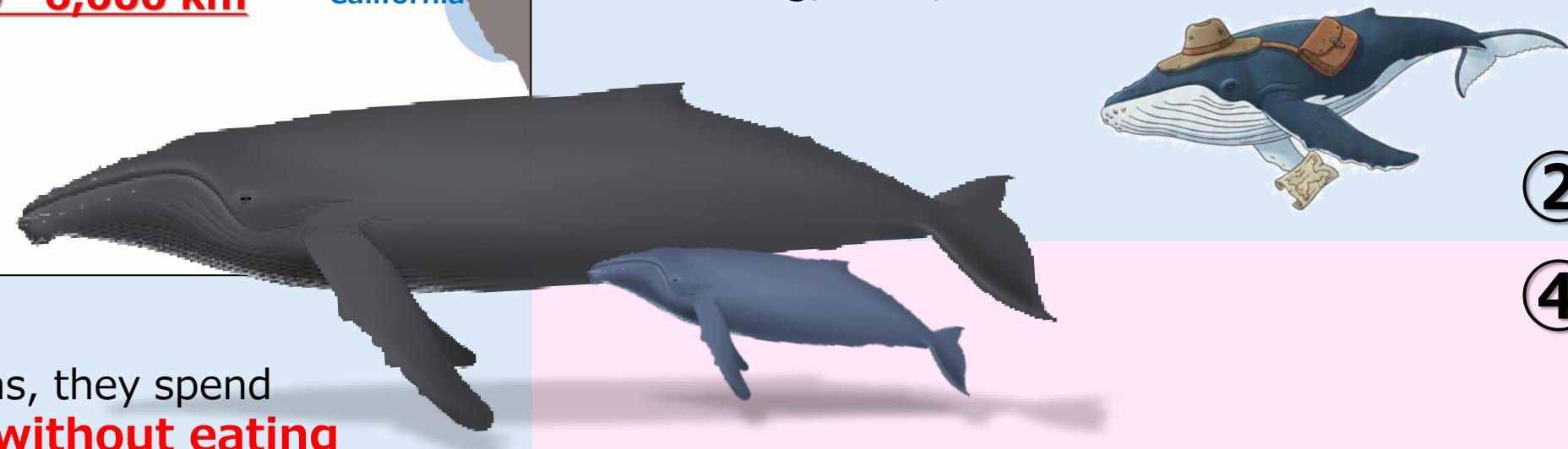


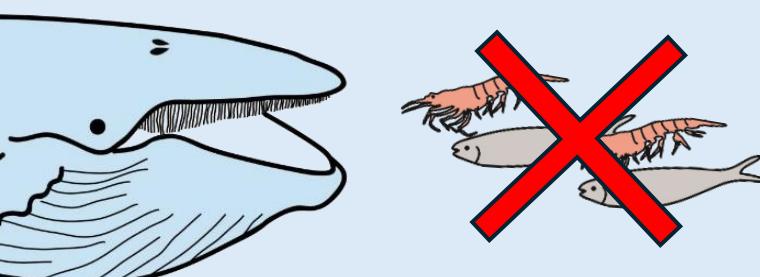
# Why is it important to minimize disturbance to mother-calf whales in breeding areas?



Humpback whales travel about **4,000–6,000 km** from **cold feeding areas** near Russia to **warm breeding areas** for mating, birth, and calf care.



In breeding areas, they spend **several months without eating** — or eating almost nothing!



During this time, female whales **give birth in the breeding waters (Here!)** after about a year of pregnancy.



Just before birth, a pregnant whale's energy use increases dramatically!

Studies show that,

**Nearly 99% of a mother whale's pregnancy energy use is concentrated in the final ~100 days before birth!**

At the same time, this is also a period when...

- travel thousands of kilometers
- eat very little
- use a lot of energy to get ready for give birth



With all of these factors combined,

the period **just before birth is an especially demanding time for pregnant female whales in breeding areas —when even simply staying afloat requires a great deal of energy.**

After the baby is born, it becomes even harder for the mother!!

Calves (babies) grow extremely fast after birth.

Their growth requires about

**38 times more energy** than before birth.

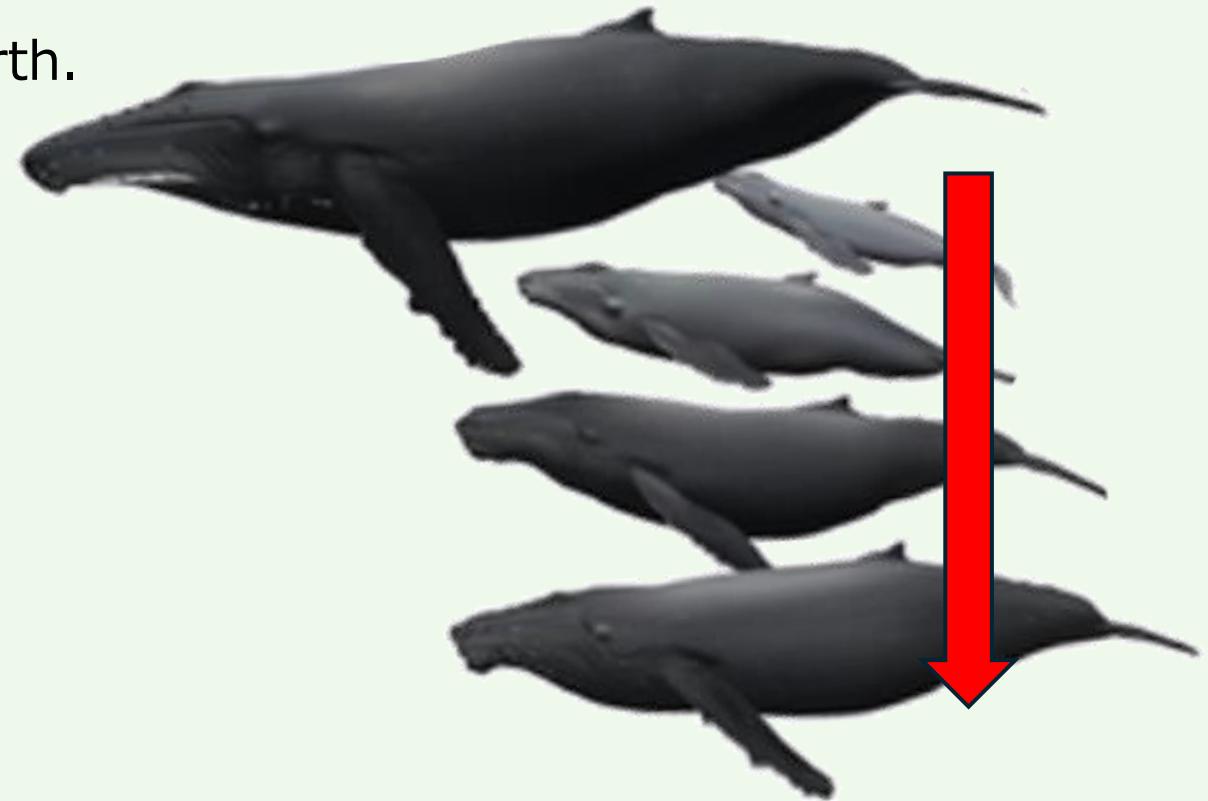
To grow, calves need

**6–8 times more energy**

per day than adults.

Baby whales get all the energy they need  
only **from their mother's milk.**

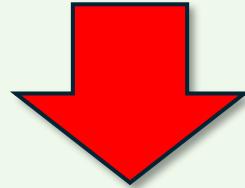
That's why ...



**During nursing, mother whales steadily lose weight day after day...**

In breeding areas, nursing mother whales

**lose about 100 kg of body weight every single day.**



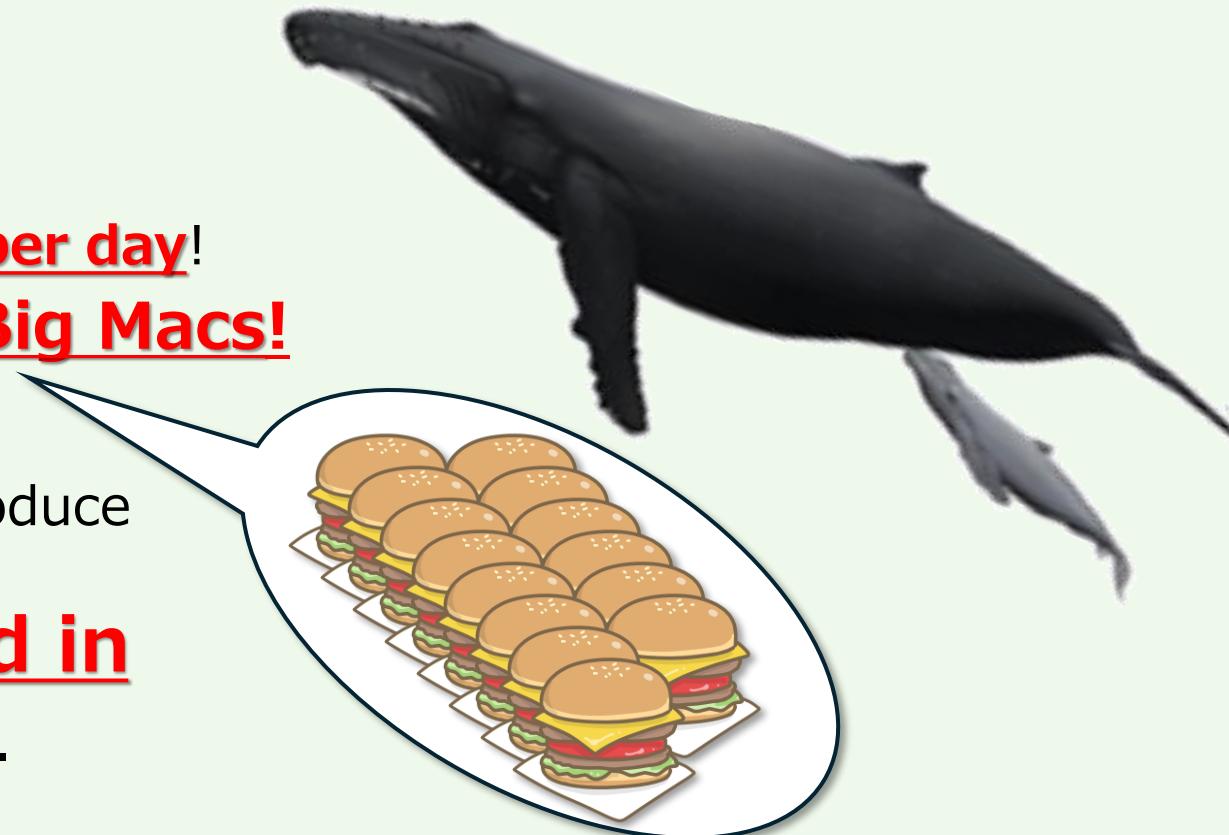
That's about **621,000 kilocalories per day!**

830 kilograms of krill **—or about 1,000 Big Macs!**

During the nursing period, mother whales produce this **enormous** amount of energy every day

**using only the nutrients stored in their own bodies** to raise their calves.

Furthermore, ...

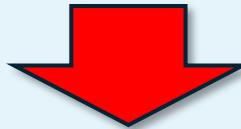


# The calf's "most important growth period" happens in breeding areas!

Calves grow rapidly during the first few months after birth!

Research shows that,

**more than 60% of the energy needed for a calf's growth is concentrated within the first 150 days** after birth.



This same ~150-day period is when mothers stay in breeding areas without eating, and **when mothers and calves begin their journey together toward the feeding areas.**

Therefore, Birth, nursing, growth, and long-distance migration place **heavy demands on both mother and calf.**



Okinawa Churashima Foundation

For this reason, it is especially important to “gently watch over” mother-calf whales.

Studies show that,

from late pregnancy through raising a calf is the

**hardest time of the year for humpback whale mothers and calves.**



For this reason, during this period, it is especially important for mother-calf whales to have:

**“time to rest”, “time for nursing”, and “time to recover their strength”.**

**Getting too close** or **watching too often** can make mother and baby whales **change their behavior** and **use extra energy**.  
**This can affect how well the calf grows and survives.**

That is why we **try to minimize disturbance** to mother-calf whales and choose to watch over them quietly and gently.

