The tragedy of the commons

A riso-print film on why shared resources get overused, and why they don't have to be. A text version of the film, for anyone who cannot watch it.

About this document

The film lasts 2 minutes 10 seconds and has no narration. Everything it says appears as captions below the picture, or as words in the picture itself. It has an optional soundtrack of music and sheep bleats, which is off unless you switch it on.

This version gives all the words in the film exactly, describes what is shown, and describes the sound. It follows the film in order, with approximate timings. In each section, "On screen" gives the exact words, "What you see" describes the picture and its movement, and "Sound" describes the music.

The film looks like a riso print: three inks, yellow, fluorescent pink and blue, printed slightly out of line on grainy cream paper, so that where yellow and blue overlap they make green. Words in the picture are printed in solid blue on top. Each caption first appears over a still picture, and the movement it describes follows once there has been time to read it.

If you find any problems with this document or the film, please contact Steven Williams at s.williams10@lse.ac.uk.

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The page

On screen

The heading reads "The tragedy of the commons". Beneath it:

> A two-minute riso-print film on why shared resources get overused – and why they don't have to be. With captions and sound.

A box headed "A demo, not a lesson" reads:

> This film shows how educators can use Claude to make animated teaching resources. The tragedy of the commons was chosen simply as an example topic, and all the content should be treated as unchecked dummy content.
>
> Every picture, movement, note and bleat is code, written by Claude Opus 5.5 (on high effort) in an ordinary Claude chat, from the director's prompts. No drawing, animation or audio software, stock images or recorded sounds were used.

Below the film are the caption, then the controls: "Previous", "Play" and "Next" buttons, a "Sound off" button that switches to "Sound on", a slider for the position in the film, and the

time, for example “0:00 / 2:10”. Below them are six chapter buttons: “A shared field”, “One more sheep”, “Everyone does it”, “Collapse”, “Agreed rules” and “Class brainstorm”.

What you see

The film is square. Four cottages stand in the corners, pink with blue roofs, each with a flag in its own colour: pink, blue, yellow, and pink and blue. Between them lies the pasture, an irregular oval of green dots inside a dotted blue wall, with round trees around it. The sheep are small and white with dark heads, and each has a coloured spot matching its herder’s flag. Along the bottom, a chart draws two lines as the film goes on: a green line for the grass and a pink line for the sheep, labelled “grass” and, for example, “12 sheep”.

The film

This table gives the number of sheep on the pasture, as shown by the chart’s label, at the end of each part of the film.

Part of the film	Sheep on the pasture	Grass
A shared field	12 (3 each)	Full
One more sheep	13	Full
Everyone does it	32 (8 each)	Thinning fast
Collapse	8 (2 each)	Almost gone
Agreed rules	12 (3 each)	Growing back
Class brainstorm	12 (3 each)	Full again

Title card

0:00 to 0:08

On screen

> The tragedy of the commons
>
> after Garrett Hardin (1968)

What you see

The title, in large solid blue type over a pink shadow set slightly down and to the right, sits on a band of cream paper across the middle of the pasture, with the subtitle in smaller blue type below. Around it, the sheep graze. After about seven seconds the title fades away.

Sound

Soft held chords and a short, gentle phrase on a celesta. As the title fades, a single sheep bleats.

1. A shared field

0:08 to 0:31

On screen

> A shared field, open to every herder in the village.
>
> Four herders share one pasture. The grass grows back as fast as their sheep eat it.

What you see

The whole pasture, green and full, with 12 sheep grazing, three for each herder, drifting slowly as they eat. The chart's two lines run level along the bottom of the picture.

Sound

Quiet chords while the captions are read, then a light flute tune over plucked strings as the sheep graze. Another sheep bleats.

2. One more sheep

0:31 to 0:49

On screen

> One herder adds a sheep. The gain is all theirs – the cost, a little less grass, is split four ways.

In the picture: "+1" beside the top-left cottage, and "−¼" beside each of the four cottages.

What you see

Once the caption has been read, a new sheep walks out from the top-left cottage onto the pasture. A large pink and blue "+1" springs up beside that cottage, then a blue "−¼" appears beside each cottage in turn: the gain goes to one herder, while the cost is shared by all four. The chart's sheep line steps up to 13. The callouts hold, then fade.

Sound

A bouncy plucked-string figure as the sheep arrives, with an excited bleat. A bright glockenspiel ping marks the "+1", and four falling plinks mark the cost split four ways.

3. Everyone does it

0:49 to 1:08

On screen

> Every herder does the same sum, and adds another sheep. And another.

What you see

Sheep walk out from all four cottages, one after another, until 32 crowd the pasture. Patches of pink and orange dots, bare earth, spread through the green as the grass is eaten faster than it can grow. On the chart, the sheep line climbs and the grass line starts to fall.

Sound

A plucked-string pattern that climbs a step every few seconds and grows louder, with a quick run of eager bleats as the sheep arrive. It ends on a held, unresolved chord.

4. Collapse

1:08 to 1:28

On screen

> The grass can't keep up. No one set out to ruin the pasture – each choice made sense on its own.

What you see

The green dots almost disappear, leaving the pasture nearly all pink and orange bare earth. Sheep walk back to their cottages until only eight are left. On the chart, the grass line drops to the bottom and the sheep line falls with it.

Sound

The music turns minor and sparse: slow, falling string chords with a few quiet celesta notes, and four drawn-out, sad bleats as the sheep are led away.

5. Agreed rules

1:28 to 1:48

On screen

> It isn't inevitable. Elinor Ostrom found communities that have shared pastures for centuries, using agreed limits, monitoring and trust.

In the picture: a sign reading "3 sheep each".

What you see

Dashed pink lines run from each cottage to a point at the top of the pasture, where a sign springs up reading "3 sheep each". One sheep walks back from each cottage, making 12 again, and green dots spread back across the pasture as the grass recovers. On the chart, the grass line climbs back up. The dashed lines then fade, leaving the sign.

Sound

Hopeful chords, a bright two-note chime as the sign goes up, the flute tune returning in a new shape, and four happy bleats as the sheep come back.

6. Class brainstorm

1:48 to 2:10

On screen

> Where else do you see a commons? As a class, list shared resources that anyone can use but no one owns – and what keeps them from being overused.

In the picture: "Where else do you see a commons?" and, below it, "Fisheries, the atmosphere, antibiotics, the office fridge…". When the film ends, a pink badge reads "Paused for the class brainstorm", and the "Play" button changes to "Replay".

What you see

A band of cream paper fades in across the pasture with the question in large solid blue type over a pink shadow, and the examples in smaller blue type. Behind it the pasture is green and full again, with the "3 sheep each" sign at the top. The film stops on this picture.

Sound

Quiet, low chords while the question is read, then a rising celesta phrase, a final bleat and a fade to silence.

Pair discussion

On screen, below the film:

> After the class brainstorm at the end of the film, pause for these questions in pairs.

1. What did each herder gain from one more sheep – and what did everyone lose? Why is that sum lopsided?
2. Who, if anyone, is to blame for the collapse? Would a better-informed herder have acted differently?
3. What makes an agreed limit stick? Who checks it, and what happens to someone who cheats?
4. Hardin's pasture had no rules at all – it was really open access. Real commons usually have rules. Does that change the lesson?

Further reading and credits

On screen, under "Further reading":

- William Forster Lloyd, Two Lectures on the Checks to Population (1833).
- Garrett Hardin, "The Tragedy of the Commons", Science 162 (1968), 1243–1248.
- Elinor Ostrom, Governing the Commons (Cambridge University Press, 1990). Ostrom shared the 2009 Nobel Memorial Prize in Economic Sciences for this work.

Under "Credits":

Role	Credit
Directed by	Steven Williams
Script, research, illustration, animation, riso printing (virtual), captions and discussion prompts, original score, sound design and voice of the sheep	Claude
Inspired by	Window Seat, a riso film by sevenevesai
Typeface	Archivo by Omnibus-Type
Made with	Claude Opus 5.5 on high effort

At the bottom of the page: "No sheep were harmed in the making of this film."

Key frames

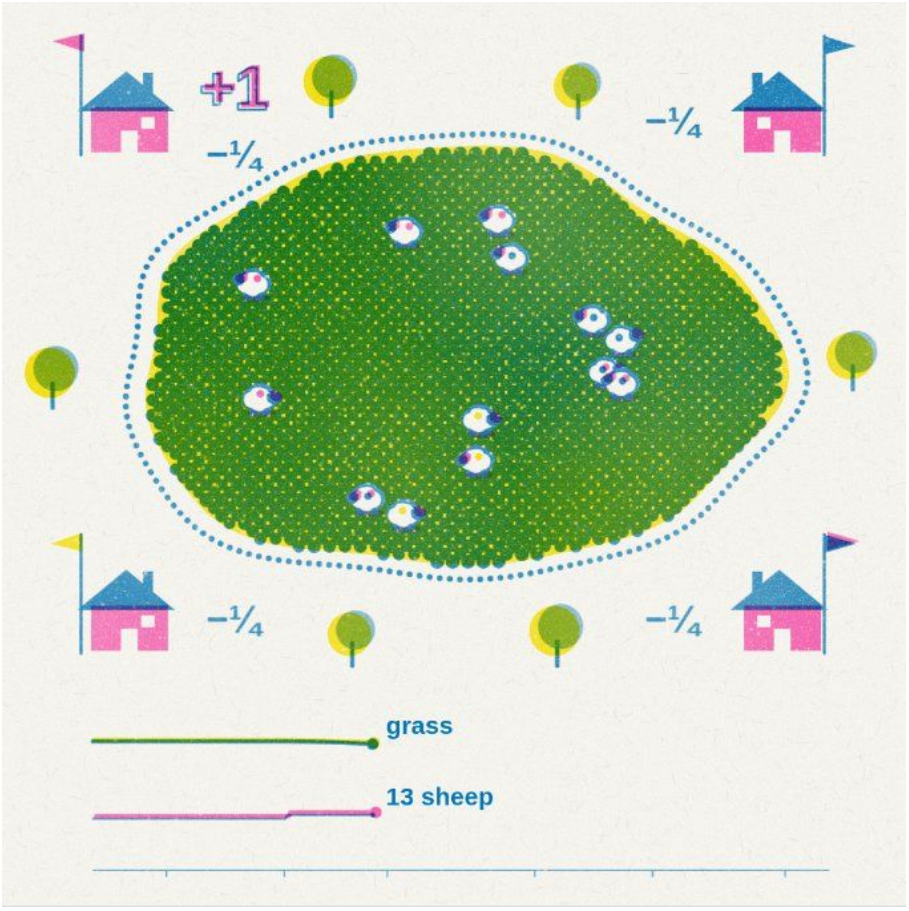
These are stills from the film.



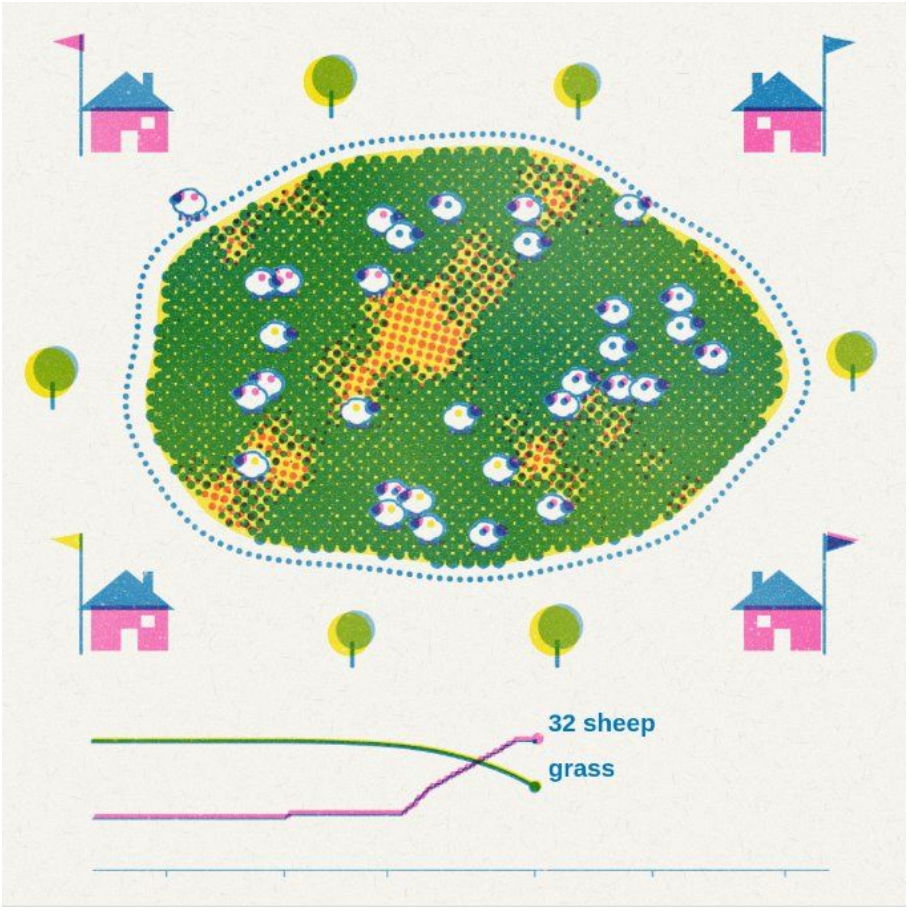
The title card.



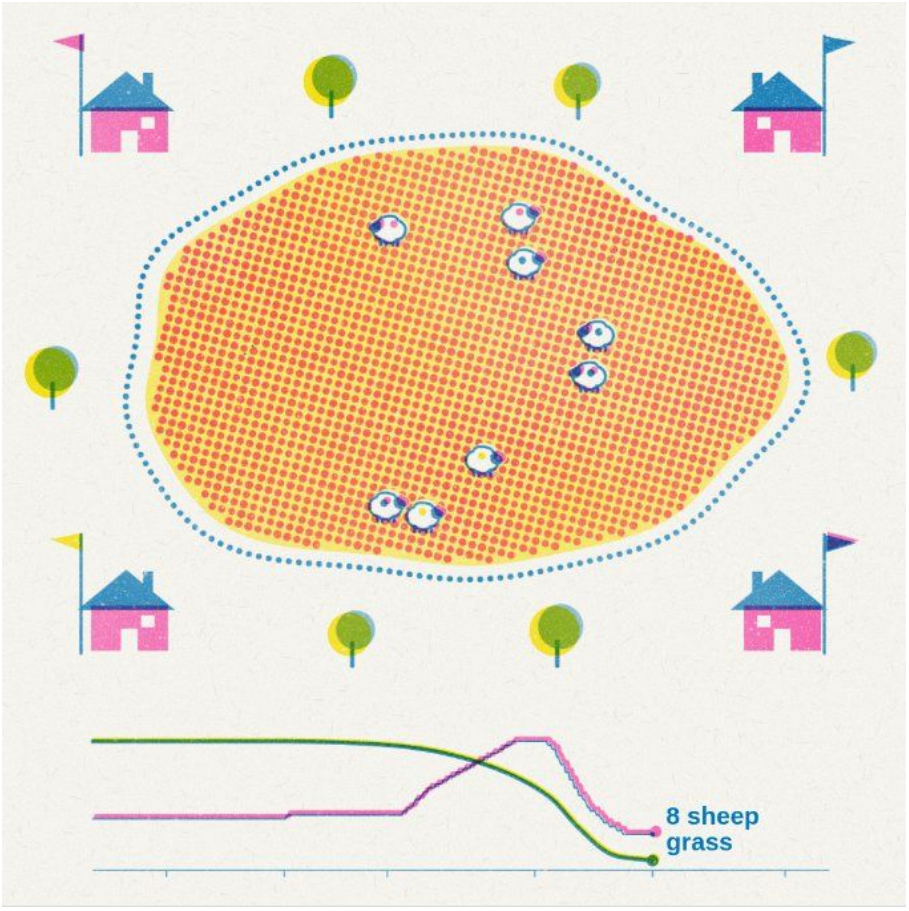
A shared field: 12 sheep, and plenty of grass.



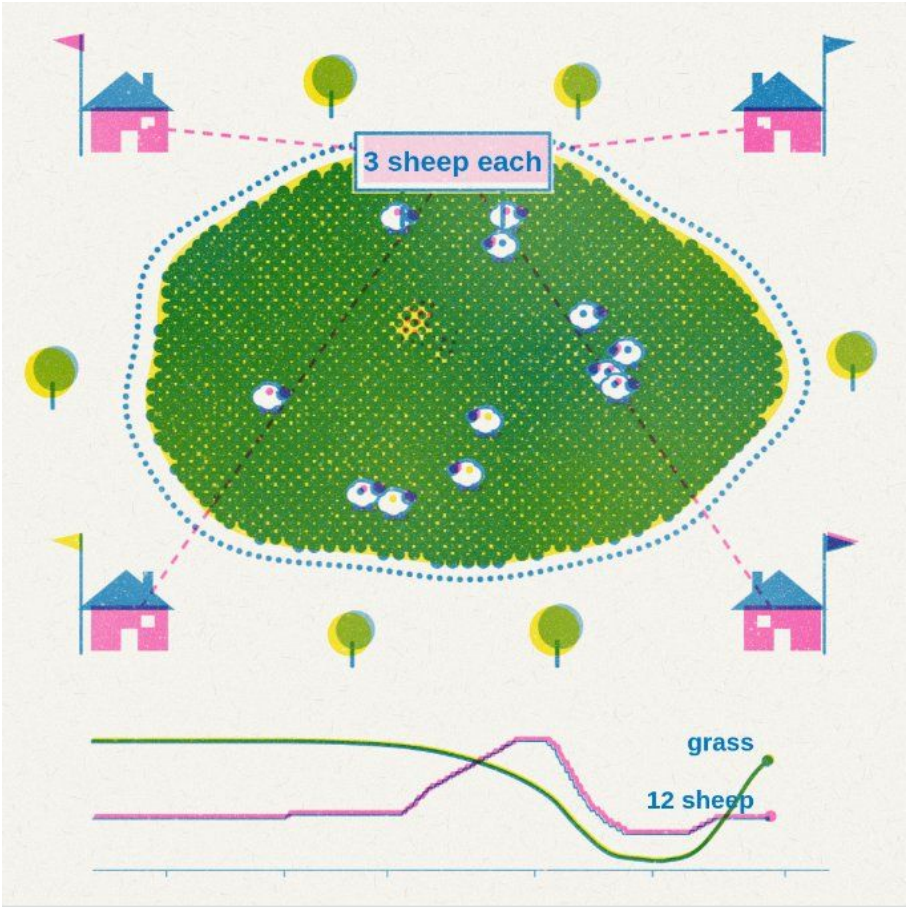
One more sheep: the gain is one herder's, the cost is shared.



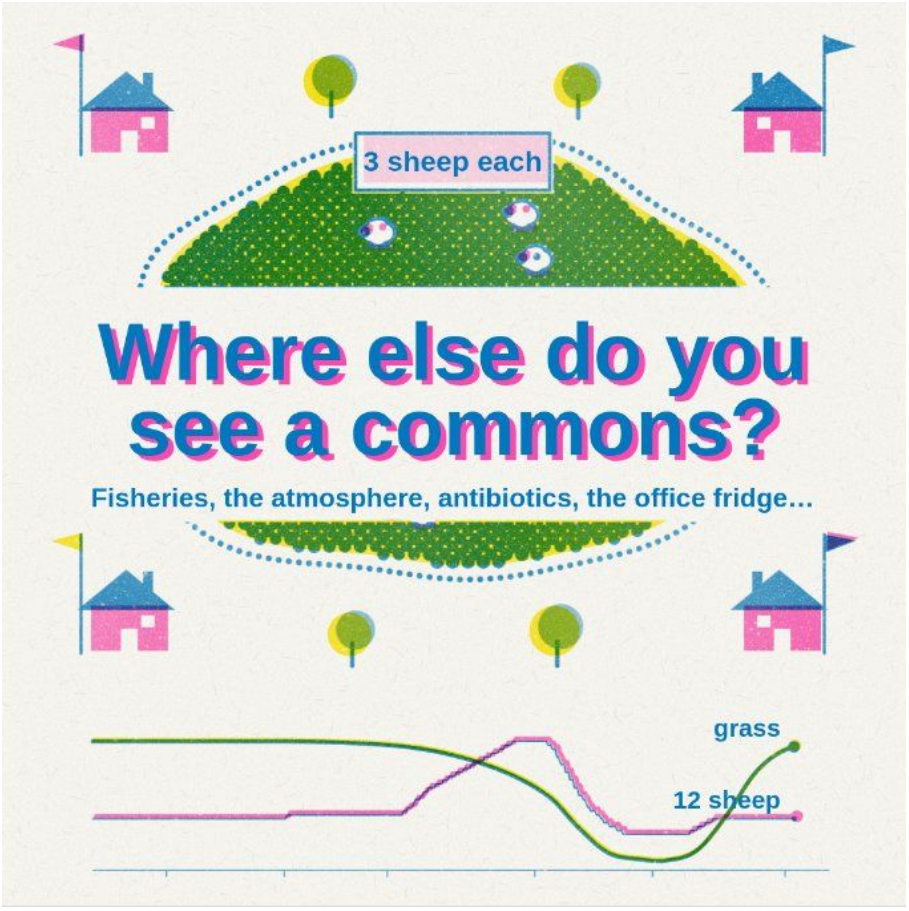
Everyone does it: 32 sheep, and the grass starts to go.



Collapse: the grass is almost gone.



Agreed rules: a limit everyone signs up to, and the grass recovers.



Class brainstorm: the question the film ends on.