

TIDEPOOL

"Substrate"

Episode 104

Written by

[First Draft]

COLD OPEN

EXT. ROCKY SHORE - SITE 4 - DAWN

Site 4, two weeks after the storm. The pool is still mostly bare -- scoured rock, a thin film of diatoms starting to coat the surface, a few pioneer barnacle cyprids visible if you know what to look for. Lena knows what to look for.

She's set up a new monitoring protocol for the site -- a tighter grid of quadrats, photographed every three days, to capture the earliest stages of recolonization. It's more work. She has not asked Marco to help with it.

LENA (V.O.)

Primary succession on bare rock follows a predictable sequence. Biofilm first -- bacteria and diatoms, invisible to the eye, changing the chemistry of the surface. Then barnacles. They're the pioneers. They settle on almost anything, and once they're there, they change the substrate for everything that follows. They create texture. Crevices. Shelter. Their bodies become the architecture that lets the next species attach.

Close on the bare rock. It looks empty. It isn't. Under Lena's hand lens, the diatom film shimmers faintly -- alive, working, preparing the surface for what comes next.

LENA (V.O.)

The first thing that settles on bare rock isn't impressive. It's not the thing the ecosystem is eventually built around. It's just the thing that was willing to land on nothing.

TITLE CARD: TIDEPPOOL

END COLD OPEN

ACT ONE

INT. COASTAL RESEARCH STATION - LAB - MORNING

Lena at her desk, deep in the paper. She's in the results section now -- graphs on her screen, recovery curves for each site over nine years. The data is compelling when you see it visualized: different sites recovering at different rates, wave exposure as the key variable, a clear relationship between shelter and recruitment success.

She's been at this for an hour when Marco arrives. Late. He's carrying two coffees -- one from the Wayfarer, one from the lab machine. He sets the Wayfarer one on Lena's desk.

MARCO

Peace offering. I know I'm late.

LENA

(looking at the cup)

You didn't have to do that.

MARCO

Becca made it. She said to tell you she put an extra shot in it because you look like someone who needs an extra shot.

LENA

She's never met me.

MARCO

I showed her a picture. From the field. You were counting anemones.

Lena processes this. Marco showed his girlfriend a photograph of Lena. This means Lena exists in a conversation she is not part of -- a conversation between two people who talk about their days and their friends and the people around them. Lena is a character in someone else's story and didn't know it.

She takes a sip of the coffee. It's good.

LENA

Tell her thank you.

MARCO

You could tell her yourself.
She's working tonight -- we were
going to get dinner at the
Wayfarer after the afternoon
session. You should come.

The invitation sits in the air. Dinner. At a restaurant.
With people. One of whom she knows slightly and one of
whom she doesn't know at all.

LENA

I have a lot of work on the paper
tonight.

MARCO

Right. No, sure.
He doesn't push. He goes to his desk and starts pulling up
his own data. But before he sits down:

MARCO

Hey -- can I look at your Site
Four recovery grid? I want to
compare your quadrat placement
with the setup I'm using for my
thesis sites.

A small request. Professional. Reasonable. And Lena
hesitates. Not long -- a half-second. But the audience
sees it: the instinctive tightening before she lets
someone look at her work.

LENA

It's on the shared drive. Folder
labeled Site 4 Recovery.

MARCO

Thanks.
He opens the folder. Lena watches him open it from across
the room. Her data. Her grid. Her site. On his screen now.
She turns back to her own work, but her posture has
changed -- slightly more upright, slightly more contained.
A pool at low tide, conserving what's inside.

EXT. ROCKY SHORE - VARIOUS SITES - AFTERNOON

Afternoon monitoring. A beautiful day -- rare clear skies, light wind, the ocean behaving itself. Lena and Marco work their way through the sites.

At Site 7, Lena checks the juvenile star. Thirty millimeters now. Growing steadily. She photographs it, notes the measurement. Marco is working the lower zone nearby.

MARCO

(calling up)

How's Steve?

LENA

Thirty.

MARCO

Thirty! That's like -- that's a real starfish now.

LENA

It was always a real starfish.

MARCO

You know what I mean. It's past the critical window, right? Post-settlement mortality drops off significantly after thirty millimeters.

LENA

Approximately. The literature says twenty-five to thirty for Pisaster. But every site is different.

MARCO

Still. Good odds. Steve's going to make it.

LENA

(a beat)

Maybe.

But the way she says "maybe" -- it's not pessimism. It's the superstition of someone who cares more than she's willing to admit and doesn't want to jinx it. The audience

hears this. Lena does not.

They move on to Site 4. The bare rock. Lena runs her new recovery protocol -- the tight grid, the careful photography. Marco watches her work.

MARCO

This is going to be an incredible data set.

LENA

If I keep monitoring it.

MARCO

What do you mean if?

LENA

If the station keeps its funding. If the site reviewer decides the intertidal program is worth the operational cost. If the paper is strong enough. If.

MARCO

The paper is strong enough. Have you looked at your own data?

LENA

I've done nothing but look at my own data for nine years.

MARCO

That's not what I -- I mean the results. The recovery curves. Site-to-site variation as a function of wave exposure. Nobody has that. It's publishable in Ecology easily. Maybe PNAS if you frame it right.

Lena is quiet. She knows he's right. The data is good. The problem was never the data.

LENA

The data is fine. I can't write the discussion.

MARCO

Why not?

LENA

Because the discussion is where you say what it means. And I keep writing what happened and I can't get to what it means.

She says this looking at the bare rock of Site 4 -- the empty substrate, the wiped-clean pool. She's talking about the paper. She's also talking about everything else. Marco hears the first thing. The audience hears the second.

MARCO

(carefully)

Do you want help? I could take a pass at the discussion section. Just a draft. You'd rewrite the whole thing anyway.

Lena looks at him. Linda's suggestion from Episode 3 -- the co-author idea -- hanging in the air alongside Marco's offer. Two people telling her the same thing: let someone in.

LENA

Let me think about it.

MARCO

Okay.

He doesn't push. He goes back to his quadrat. Lena goes back to hers. The bare rock between them.

END OF ACT ONE

ACT TWO

INT. THE WAYFARER - EVENING

We've never been inside the Wayfarer before. It's a local bar, not a tourist bar -- dark wood, a pool table nobody's using, fishing nets on the walls that are decorative but also probably real. A half-dozen regulars at the bar. Baseball on a mounted TV with the sound off.

BECCA SANTOS (28) is behind the bar. She's the kind of person who makes a small space feel occupied -- not loud, just present. Short dark hair, sunburned forearms, a tattoo of a compass rose on her wrist. She moves behind the bar with the efficiency of someone who's been doing it for years.

Marco sits at the bar eating fish and chips. They talk between her pouring drinks for other customers -- the fractured, interrupted rhythm of dating someone who works in a bar.

BECCA

(pulling a pint for someone
else)

So did she come?

MARCO

No. Paper.

BECCA

You said she wouldn't.

MARCO

I keep asking because I keep
thinking she'll surprise me.

BECCA

(delivering the pint, coming
back)

Some people are indoor cats,
Marco. You can leave the door
open but you can't make them go
outside.

MARCO

She's not an indoor cat. She's
outside all the time. She's
outside more than anyone I've
ever met. She's just... outside
alone.

Becca looks at him. She can see something in how he talks about Lena -- not attraction, but a kind of worry. The worry of a person who stumbled onto something and isn't sure it's his business.

BECCA

She's been here nine years?

MARCO

Nine years. Same sites. Same schedule. Same everything.

BECCA

And nobody... close? Nobody in town?

MARCO

She has a sister in California. She sends the sister's kids pictures of starfish. She has colleagues at the station. Patricia likes her. Doug barely talks to anyone. There's a woman who runs on the beach with a dog -- they wave.

BECCA

That's her whole circle.

MARCO

I think that's her whole circle. Beat. Becca wipes down the bar. A customer signals for a check. She handles it, comes back.

BECCA

You know, there's a woman who comes in here most Thursdays. Sits at the end. Orders one glass of wine and reads. Never talks to anyone. Been doing it for as long as I've worked here. I used to think it was sad. Then one night I asked her about her book and she talked to me for twenty minutes about -- I don't know, something about whaling. She was hilarious. Then she finished her wine and left and the next Thursday she was back in the same spot.

MARCO

What's your point?

BECCA

I don't know. Maybe she's fine.
Maybe that's just her speed.

MARCO

Maybe. But I watched her document
the destruction of her best study
site -- nine years of work, just
gone -- and she didn't say a
word. She just measured it.

BECCA

(quiet)

Yeah. That's not fine.

Marco eats a fry. Becca pours someone a beer. The scene
breathes. This is not a scene about Marco and Becca's
relationship -- it's a scene about Lena, seen from the
outside, by two people who are close enough to notice and
far enough away to say what they see.

INT. LENA'S COTTAGE - KITCHEN - SAME TIME

Lena at the kitchen table. The paper on her laptop. She's
in the discussion section -- the part she can't write. The
cursor blinks at the end of a paragraph she's written and
deleted three times.

The cottage is very quiet. Rain -- light, steady, the kind
that Oregon does for days at a time. The children's crayon
drawings are still propped against the salt shaker. Steve
with forty legs. The anemone eating a hot dog.

She types: "The central finding of this study is that
recovery trajectories in the rocky intertidal are strongly
mediated by site-specific wave exposure, with sheltered
sites exhibiting significantly faster --"

She stops. Reads it back. Correct. Inert. She deletes it.

She types: "Nine years of continuous monitoring at twelve
sites reveals --"

Stops. Deletes.

She pushes the laptop away. Puts her head on her folded arms on the table. Not sleeping -- thinking. Or trying not to think. The rain on the windows.

After a moment, she lifts her head. Pulls the laptop back. Types something different this time, without stopping to edit:

"The question this data set answers is not what it was designed to answer. It was designed to track species abundance over time. What it actually records is what happens when you stay. When everyone else moves on to the next grant, the next site, the next question -- what do you see if you don't leave?"

She stares at this. It's not the kind of sentence that goes in a journal article. It's the kind of sentence that comes from the place behind the journal article. She highlights it. Her finger hovers over the delete key.

She doesn't delete it. She saves the document and closes the laptop. Goes to bed.

The sentence stays.

END OF ACT TWO

ACT THREE

EXT. ROCKY SHORE - SITE 4 - DAWN

Morning. Lena at Site 4, running the recovery protocol. The bare rock is changing -- barely, but changing. Through her hand lens: barnacle cyprids. Tiny, translucent, the size of a grain of rice. The pioneers have arrived.

LENA (V.O.)

First settlers. *Chthamalus dalli*.
Acorn barnacles. They cement themselves to the rock headfirst and build a shell around their body. Once they attach, they never move again. That's the trade. Permanence for mobility.

You pick your spot and you stay
there.

She photographs the cyprids. Counts them. Maps their
positions on the grid. The painstaking work of recording
something that almost nobody else would notice -- the very
beginning of a community, the first mark on an empty page.

EXT. ROCKY SHORE - SITE 7 - LATER

Lena finishes at Site 4 and walks north to Site 7. The
routine. The rhythm. But this morning she stops at the
bluff above the site before descending.

Diane is on the beach with the golden retriever. She sees
Lena and waves -- a real wave, not a nod. Lena waves back.

DIANE

(calling up from the sand)
How'd your rocks do in the storm?

LENA

(calling down)
One site took a big hit. The
others held up.

DIANE

The one down south? By the point?

LENA

You noticed?

DIANE

Hard not to. The whole bench
looked different after. I walk
past it every morning.

LENA

It's starting to come back.
Barnacles settling. It'll take a
few years but it'll rebuild.

DIANE

That's good. I always liked that
stretch. The kids from the school
used to come look at the
tidepools there.

Lena didn't know this. She's been at the site hundreds of times and never noticed schoolchildren. Or she noticed them and didn't file them as relevant data.

LENA

I didn't know that.

DIANE

(smiling)

Well, you're always looking down.
At the pools. I'm always looking
out. At the water. We probably
walked right past each other a
hundred times.

This lands on Lena quietly. Two people occupying the same landscape for years, each looking in a different direction, only now turning to see each other. She doesn't have a response. Diane doesn't need one.

DIANE

Come on, Murphy. Let's go.

Diane and Murphy the golden retriever continue down the beach. Lena descends to Site 7 and begins her count.

INT. COASTAL RESEARCH STATION - LAB - AFTERNOON

Lena at her desk. She opens the paper. The sentence from last night is still there: "What do you see if you don't leave?" She reads it. Reads it again.

She opens a new email. Types Marco's address. Types a subject line: "Discussion section -- draft help."

She writes: "Marco -- I've attached the current draft. The introduction, methods, and results are in reasonable shape. The discussion is not. If the offer still stands, I'd welcome a co-author's perspective on the framing. The data says something important. I'm having trouble finding the right words for what it is. -- Lena"

She attaches the document. Her cursor hovers over Send. The document contains nine years of work. Her entire professional output in one file. She is about to share it with a 26-year-old she's known for five weeks.

She clicks Send.

Then she sits very still in her chair, the way she sits when a wave comes up higher than expected -- not panicked, but alert, recalculating the safe footing.

EXT. CANNON BEACH - ROCKY SHORE - MAGIC HOUR

End of the day. The light doing its thing. Lena at the bluff above Site 4, looking down at the bare rock. The tide is high -- the pools are connected, submerged, part of the ocean again. The barnacle cyprids she photographed this morning are underwater now, fed by the current, held by the rock.

Her phone buzzes. Marco. She opens it.

"Got it. Reading now. This data is UNREAL. Also I think that paragraph about what you see when you don't leave should be the opening line of the whole paper. Talk tomorrow?"

Lena reads the message. Reads it again. The paragraph she almost deleted. The sentence that came from the place behind the science. Someone read it and said: that's the opening line.

She types: "Okay. Tomorrow." Sends it.

She stands on the bluff above her damaged site, her shared data, her almost-deleted sentence, and the barnacles that are cementing themselves headfirst to bare rock because that's what pioneers do. They pick a spot and they stay.

LENA (V.O.)

Substrate isn't just a surface.
It's a commitment. The organism
and the rock make a pact: I will
hold you and you will not let go.
Everything that grows here
afterward depends on that first
attachment holding.

Wide shot. Lena on the bluff, the ocean below, the sky going copper and pink above Haystack Rock. She stays a moment. Then turns and walks to her car.

In the parking lot, Diane's car is there -- she must be doing an evening walk. And Marco's rental. And a truck

Lena doesn't recognize.

Three cars. Lena's Subaru makes four. The parking lot has never had four cars in it when Lena was here.

She gets in her car. Sits for a moment before turning the key. Something is different and she can't name it. The parking lot is the same. The ocean is the same. The sites are the same, minus Site 4, plus some barnacles.

What's different is the number of people who know she's here.

She starts the car. Drives home.

END OF EPISODE