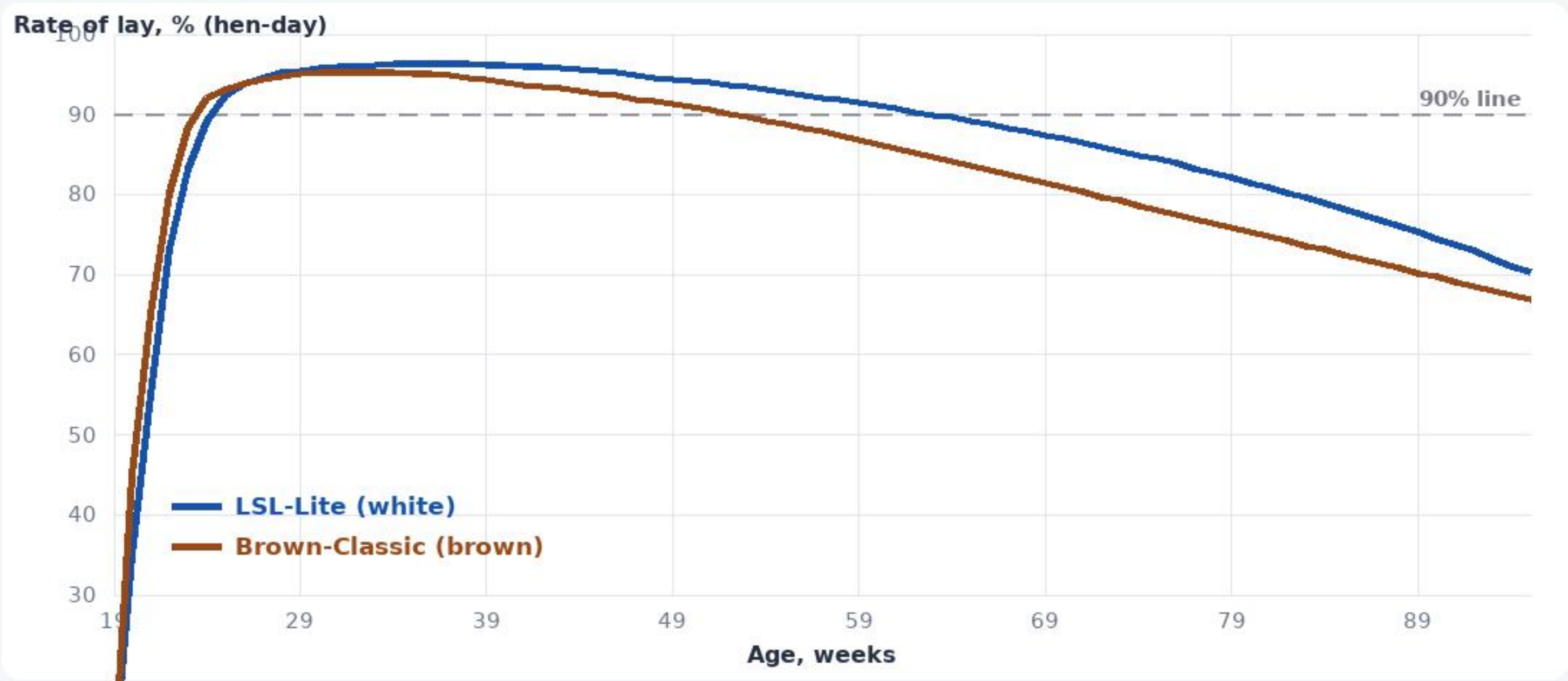


Peak is easy. Persistency pays.

Two Lohmann guides — LSL-Lite and Brown-Classic — read straight from Table 18.

The production curve: 50% → peak → the long decline



50% lay at 140-145 days for both breeds; peak 95-97% (LSL) / 94-96% (Brown) by ~week 30. The climb is fast and nearly identical. Everything that separates two flocks is the slope of the decline after peak — that is persistency, and it is most of the cycle.

Persistency — how slowly the curve comes down

WEEKS HOLDING ≥90% HEN-DAY LAY

LSL-Lite (white)	week 25 → 62	38 weeks
Brown-Classic (brown)	week 24 → 52	29 weeks

Same peak, but LSL holds above 90% for nine extra weeks. Persistency is the flat shoulder of the curve — the part nobody sets as a target, where a flock earns back everything the pullet cost to rear. A gentle slope is worth more than a high peak.

Two breeds: white lays more, brown lays heavier

	LSL-LITE	BROWN-CLASSIC
Eggs / hen housed, to 95 wk	445	430
Avg egg weight, to 95 wk	61.9 g	65.2 g
Egg mass / hen housed, to 95 wk	27.57 kg	28.02 kg
Feed conversion, kg/kg egg mass	1.9-2.1	2.0-2.2

More eggs is not more egg mass

LSL lays 15 more eggs to 95 weeks (445 vs 430) — but Brown's eggs are heavier, so Brown edges total egg mass, 28.02 vs 27.57 kg. Pick the breed on what the market pays for: egg number and feed efficiency (white), or egg size and mass (brown).

Egg weight climbs as laying rate falls

The two curves move in opposite directions. Egg weight rises across the whole cycle — LSL 41 → ~65 g, Brown 45 → ~69 g — while rate of lay falls after peak. So egg MASS holds up long after egg NUMBER starts sliding, and lay % alone under-reads the output.

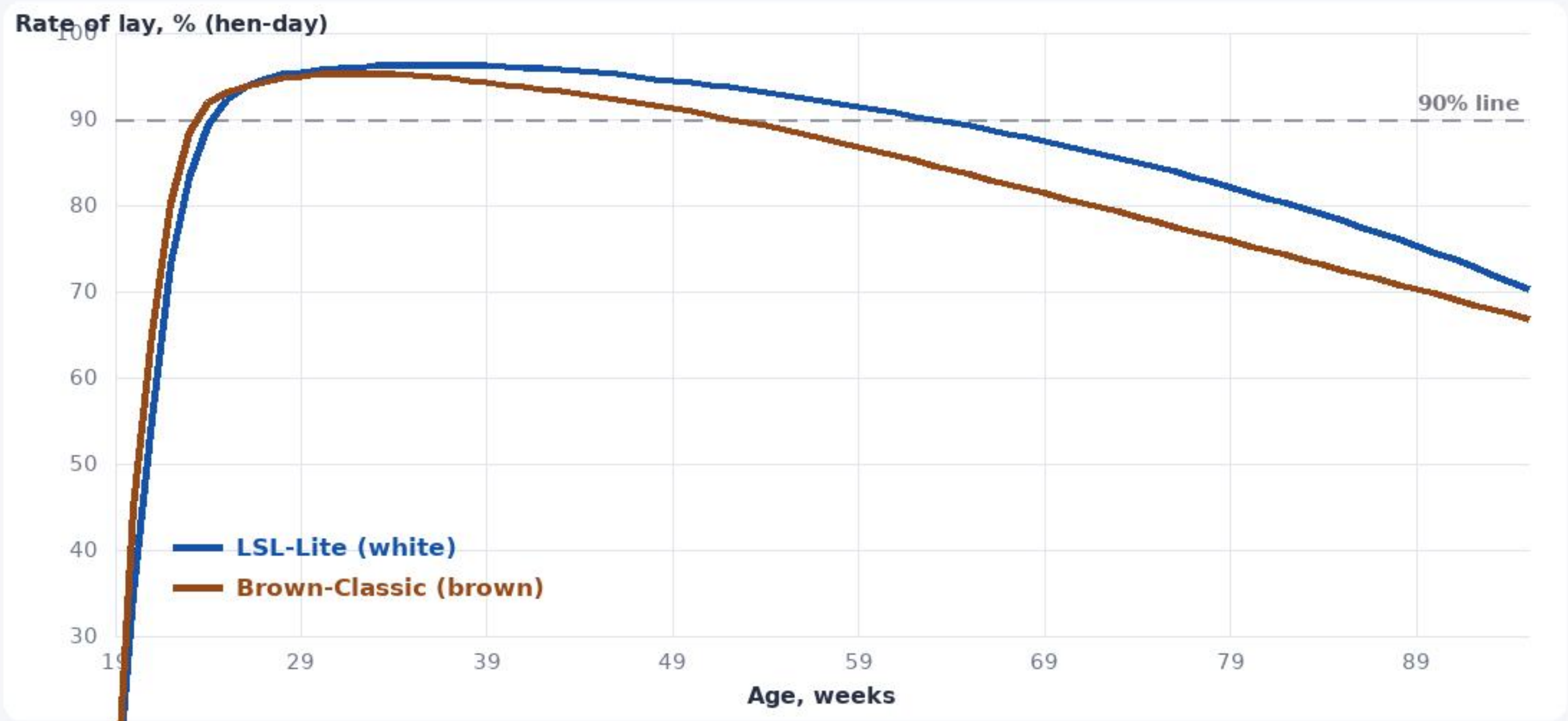
The rule this deck is arguing for

Judge a flock by its decline, not its peak. Persistency — the slope after peak and the weeks held above 90% — decides whether the flock pays. And read egg mass, not just egg number, because egg weight rises as rate falls. The curve is the flock's whole scorecard.

Based on Lohmann LSL-Lite and Brown-Classic Cage Management Guides — Performance Data pages and Table 18 (Performance Goals, weeks 19-95). Full provenance: 01-monday/SOURCES.md

One curve, three parts: climb, peak, decline

Lohmann Table 18 — rate of lay (hen-day), weeks 19-95, both breeds



The climb — first egg to peak

Both breeds reach 50% lay at 140-145 days (~week 20-21) and climb to peak in about ten weeks. The climb is steep and nearly identical between breeds — a fast, uniform onset is a rearing and transfer story, set before the first egg is counted.

The peak — a fortnight, not a season

Peak is 95-97% for LSL and 94-96% for Brown (Table 18 hen-day peaks: 96.3% and 95.3%). It sits around weeks 28-33 and holds for only a couple of weeks before the decline begins. Almost every managed flock reaches a similar peak — so peak alone barely separates them.

The decline — most of the cycle

From ~week 33 the curve falls for the rest of the flock's life. How fast is persistency, the subject of the next page. LSL falls more gently than Brown; by week 95 LSL is at 70% hen-day and Brown at 67%. The decline, not the peak, is where flocks are won or lost.

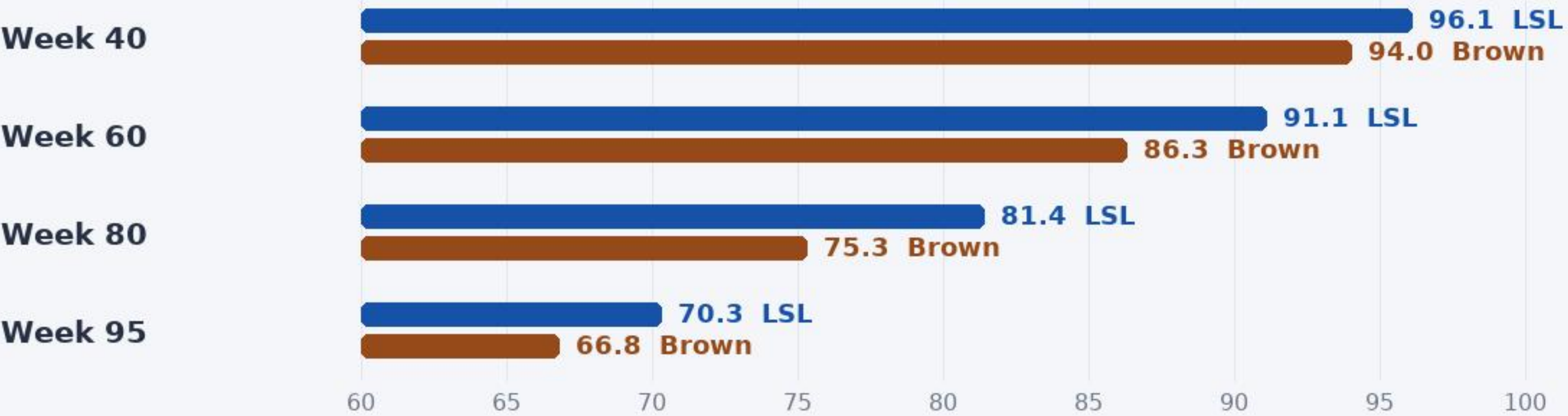
How slowly the curve comes down

Lohmann Table 18 — weeks held above 90% hen-day lay

WEEKS HOLDING ≥90% HEN-DAY LAY (Table 18)

LSL-Lite (white)	week 25 → 62	38 weeks
Brown-Classic (brown)	week 24 → 52	29 weeks

Rate of lay by phase, hen-day % — the divergence widens with age



At peak the breeds are within ~1 point; by week 80 the gap is ~6 points. Persistency is a slope, not a level.

What persistency means economically

The pullet-rearing cost is sunk before the first egg. Every week the flock stays near peak spreads that fixed cost over more eggs and lays down more saleable mass on top. Nine extra weeks above 90% (LSL vs Brown) is a large block of near-free production — which is why a flat shoulder is worth more than a high peak.

Why the curve declines at all

Older hens ovulate slightly less often and drop more eggs from the sequence, so daily rate falls even in a healthy flock. Poor light, heat, feed changes or disease steepen it. Persistency is partly genetic (LSL is bred flatter) and partly the sum of daily management.

TWO BREEDS

White lays more. Brown lays heavier. Mass crosses over.

Lohmann Performance Data — LSL-Lite and Brown-Classic to 95 weeks

	LSL-LITE (white)	BROWN (brown)
Eggs / hen housed, 72 wk	329	320
Eggs / hen housed, 80 wk	372	360
Eggs / hen housed, 95 wk	445	430
Avg egg weight, 95 wk	61.9 g	65.2 g
Egg mass / hen housed, 95 wk	27.57 kg	28.02 kg
Feed conversion	1.9-2.1	2.0-2.2
Body weight, end of lay	1.72 kg	2.06 kg
Livability, laying period	93-94%	93-95%

The crossover, in one line

LSL lays 15 more eggs to 95 weeks (445 vs 430). Brown's eggs are ~3 g heavier, and that size more than makes up the count: Brown produces 28.02 kg of egg mass to LSL's 27.57 kg. More eggs is not more mass. If you are paid by the kilo, count differently than by the egg.

What white buys

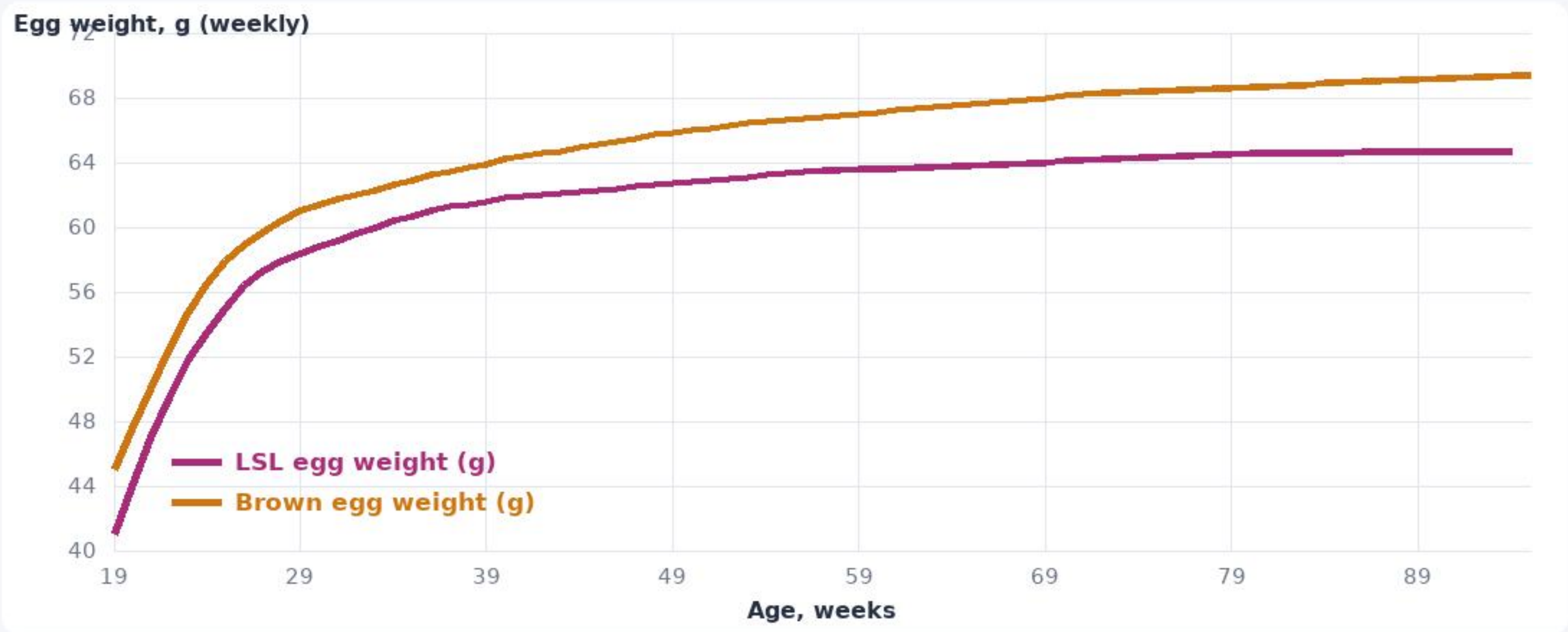
More eggs, better feed conversion (1.9-2.1 vs 2.0-2.2) and a smaller, lighter bird (1.72 vs 2.06 kg at end of lay) that eats less to run. Flatter persistency, too — 38 weeks above 90% against 29. The efficient choice per bird and per kg of feed.

What brown buys

Heavier eggs and slightly more total egg mass, brown shell colour for the markets that pay for it, and comparable livability. The trade is a bigger bird, more feed and a steeper decline. Match the breed to the market, not to habit.

Egg weight climbs as laying rate falls

Lohmann Table 18 — egg weight (g, weekly) against rate of lay



Two dials turned against each other

Egg weight rises steeply early, then keeps creeping up for the whole cycle: LSL from 41 g at week 19 to ~65 g by end of lay, Brown from 45 g to ~69 g. Meanwhile rate of lay peaks around week 30 and declines. Output is the product of the two.

Why egg mass holds up when rate slides

Egg mass = rate × egg weight. As a flock ages it lays fewer but bigger eggs, so egg mass per hen-day falls far more gently than rate does. Reading lay % alone under-reports a flock's true output — the kilos on the belt hold up better than the count suggests.

The catch: bigger eggs are harder shells to hold

The same shell material is stretched over a larger egg, so late-cycle eggs thin and break more easily — the reason calcium strategy rises with age (Week 6's deck). Rising egg weight is good for mass and grade, and a growing test of shell quality at the same time.

Every extra week is near-free production

Lohmann Table 18 — cumulative eggs and egg mass per hen housed

CUMULATIVE PER HEN HOUSED	72 WK	80 WK	95 WK
LSL — eggs / HH	329	372	445
Brown — eggs / HH	320	360	430
LSL — egg mass, kg	20.04	22.85	27.57
Brown — egg mass, kg	20.44	23.23	28.02

From 72 to 95 weeks: +73 eggs, +7.5 kg (LSL)

Extending the cycle from 72 to 95 weeks adds 116 eggs and 7.5 kg of egg mass per hen housed for LSL (329 → 445 eggs, 20.04 → 27.57 kg). The rearing cost is already spent, so those late eggs carry only feed and running cost — the cheapest eggs the flock ever lays.

Why persistency and cycle length are the same argument

A flock that holds rate well is the one worth keeping longer; a flock that has collapsed to 60% is being fed to lose money. The decision to extend or to moult and restart is read straight off the curve — is the slope still shallow enough to pay to keep feeding it?

What flattens the tail

Persistency is protected by steady light and feed, shell-quality management as eggs enlarge, and catching sick or off-feed birds early. Every avoidable dip in the decline is eggs that never reach the belt — and, at end of cycle, the cheapest eggs to have lost.

The curve is a flock average — persistency erodes bird by bird

Lohmann gives the target; the belt gives one number a day

What the daily figure actually is

The production curve you plot is eggs on the belt this morning divided by birds in the house — one number for the whole flock, once a day. It is the right target line to hold, and it is a very coarse instrument for seeing why the line moved.

A 3-point drop

94% → 91% is one hen in 33 laying nothing today — but not which, and not for how long.

A quiet corner

A section off feed or off the nests can slide for a week while the flock average still looks fine.

A lagging signal

By the time the decline is steep in the daily figure, it has already happened — you read a shoulder days old.

The measurement gap

Persistency is defined per flock but happens per bird — hens drop out of lay one at a time, invisibly, inside a daily average. The signal is not missing: a section going quiet is visible behaviour. It just needs something in the house, every hour, to see it start.

What it would take to close it

Not a better standard — Lohmann's curve is the right target. It would take reading laying and nesting behaviour continuously, per group, so a decline shows up as it begins instead of once it is deep enough to move the flock average. That is the part nobody is standing in the house long enough to see.

Save this and check one thing tomorrow

Plot your last fortnight of lay % against the breed standard. If the gap to target is widening — not the level, the gap — the decline has already started. Find the birds.

Based on Lohmann LSL-Lite and Brown-Classic Cage Management Guides — Performance Data and Table 18. Full provenance: 01-monday/SOURCES.md