Fisheries

Northern Zone Rock Lobster (*Jasus edwardsii*) Fishery Status Report 2024/25

A. Linnane, J. Feenstra, K. Mark and D. Graske

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SARDI Aquatic and Livestock Sciences
PO Box 120 Henley Beach SA 5022

February 2026

Status Report to PIRSA Fisheries and Aquaculture

Government of South Australia
Department of Primary Industries and Regions

SARDI
South Australian Research and Development Institute

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In the spirit of reconciliation, our commitment is to build progressive and trusting relationships, to share knowledge and learn from each other.

We recognise and own a difficult past, and together we will walk forward.

We acknowledge the many Aboriginal people of this Country as the oldest continuous living culture in the world.

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ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

This report assesses the status of South Australia's Northern Zone Rock Lobster Fishery (NZRLF) stock and provides the latest estimates of the biological performance indicators (PIs), information in context of the reference points (RPs) and stock status classification described in the Management Plan for the fishery. Stock status was determined using the harvest strategy for the fishery that was developed in alignment with the National Fishery Status Reporting Framework (NFSRF) classification system used to determine the status of all South Australian fish stocks.

The 2024 season (i.e. 2024/25) extended from 1 September to 31 August (normally 1 November to 31 October). This status report presents data from 1 September 2024 to 31 May 2025, which is the agreed assessment period considered for guiding the total allowable commercial catch (TACC) setting.

In 2024, TACC in the NZRLF was 300 t (275 t Inner sub-region and 25 t Outer sub-region). In addition, 9 t was carried over from 2023/24. The TACC, combined with carry-over, gave an available catch of 309 t. The reported logbook catch (1 September 2024 to 31 May 2025) was 286 t (93% of the available catch).

By sub-region, the logbook catch was 261 t (93% of the available catch) from the Inner sub-region and 25 t from the Outer sub-region (86% of the available catch). Effort required to take the catch in 2024 was 190,632 potlifts, which is the third lowest on record.

Catch per unit effort (CPUE) of legal-sized lobsters is the primary biological performance indicator for the fishery. In 2024, the legal-sized CPUE was 1.61 kg/potlift, the highest on record. The 2024 CPUE estimate is above the Trigger Reference Point (TrRP) (0.60 kg/potlift) for the fishery. Spatial management at a sub-zonal level was implemented in 2015, and since implementation, Outer sub-region catch rates have decreased. This contrasts with the Inner sub-region where catch rates have increased considerably since 2015.

The secondary biological performance indicator is the pre-recruit index (PRI; no. of undersized lobsters/potlift). In 2024, the PRI was 0.27 undersized/potlift which is above the trigger reference point (TrRP) of 0.16 undersized/potlift. In the NZRLF, the time taken for pre-recruits to enter the fishable biomass is estimated to be approximately one year.

Model outputs show that over the last eight seasons, biomass has increased, which, combined with reduced TACCs have reduced the exploitation rate to 15%, the lowest on record. Egg production in the fishery remains low with 2024 estimates equating to 18% of unfished levels, but with increases in recent seasons.

The stock status classification for the NZRLF is defined in the Management Plan for the fishery (PIRSA 2021). In 2024, the CPUE of 1.61 kg/potlift was above the TrRP of 0.60 kg/potlift. As a result, the NZRLF stock is classified as "**sustainable**". This means that the Southern Rock Lobster biomass is at a level sufficient to ensure that, on average, future levels of recruitment are adequate and fishing mortality is adequately controlled to avoid the stock becoming recruitment impaired.

Table 1 Key statistics for the NZRLF. Model outputs are from qR fishery model (*Catch and effort data from 2024/25 from Sept-May. All other seasons from Nov-Oct).

Statistic	2021/22	2022/23	2023/24	*2024/25
Available Catch (TACC + Carry-over) (t)	383	330	306	309
Total catch (t)	303	292	253	286
Total effort (potlifts)	245,066	228,952	179,577	190,632
CPUE (kg/potlift)	1.25	1.33	1.40	1.61
PRI (undersized/potlift)	0.22	0.18	0.21	0.27
Biomass (t)	1,629	1,656	1,942	2,192
Exploitation rate (%)	19	18	17	15
Egg Production (%)	13	13	16	18
Status	**Sustainable**	**Sustainable**	**Sustainable**	**Sustainable**

Keywords: Southern Rock Lobster, Northern Zone, Fishery Status, *Jasus edwardsii*.

1 INTRODUCTION

This report updates the 2023/24 stock assessment report for the Northern Zone Rock Lobster Fishery (NZRLF) (Linnane et al. 2025) and is part of the SARDI Aquatic Sciences' ongoing assessment program for the fishery. Its purpose is to summarise key information for the NZRLF and assess the resource status against the performance indicators outlined in the fishery's Management Plan (PIRSA 2021).

The Department of Primary Industries and Regions (PIRSA) uses the National Fishery Status Reporting Framework (NFSRF; Piddocke et al. 2021) to assess the status of all South Australian fish stocks. The NZRLF harvest strategy (PIRSA 2021) aligns with the NFSRF system to enable stock status determination. A full assessment, including detailed spatial and temporal analyses, will be presented in the 2024/25 stock assessment report, due July 2026.

In 2024/25 (hereafter referred to as 2024), the total allowable commercial catch (TACC) in the NZRLF was 300 t (275 t Inner sub-region and 25 t Outer sub-region). In addition, 9 t was carried over from 2023/24. The TACC, combined with carry-over, gave an available catch of 309 t. Fishing in the NZRLF can be undertaken over the 12-month period from 1 September to 31 August of the following year. This status report presents data new from 1 September 2024 to 31 May 2025. Data to inform the TACC is from 1 November to 31 May.

2 METHODS

Data sources presented in this report are described in Linnane et al. (2025). Briefly, the catch and effort data presented are obtained from a mandatory daily logbook program administered by PIRSA Fisheries and Aquaculture. Catch and effort data are presented by zone, sub-region and Marine Fishing Area (MFA) (Figure 1).

The primary biological indicator is commercial logbook CPUE (kg of legal-sized lobsters/potlift) from November to April. The harvest strategy sets a Trigger Reference Point (TrRP) of 0.60 kg/potlift, below which exploitation rates and TACCs are substantially reduced (PIRSA, 2021). The secondary indicator is commercial logbook PRI (number of undersized lobsters per potlift) from November to March.

In 2023, the FRDC report *"Assessing the efficiency of alternative rock lobster pot designs"* (McLeay et al. 2023) identified differences in catch efficiency between newly adopted Western Australian (WA) batten pots and traditional beehive pots for both legal and undersized lobsters. To account for this in CPUE and PRI reporting, the following adjustments were applied: (i) Inner sub-region – nominal CPUE from beehive-only users was rescaled downward by 0.9916, reflecting the 2015–2019

CPUE difference between the eight WA pot licences and the remaining fleet; (ii) Outer sub-region – nominal CPUE was based on beehive users only, with no rescaling due to limited data; and (iii) Entire zone – PRI from beehive-only users was rescaled upward by 1.0311, reflecting the 2015–2019 PRI difference between WA pot users and others. Both adjusted and unadjusted CPUE indices by pot type are presented in this report.

Length-frequency data were obtained from a fishery-dependent catch sampling program. Puerulus sampling was undertaken at four sites in the NZRLF and based on data collected from July to October.

A detailed description of the qR fishery assessment model is provided in McGarvey and Matthews (2001) and Linnane et al. (2025). The model outputs include: (i) legal-sized biomass, (ii) egg production, (iii) percentage of unfished egg production, (iv) exploitation rate (proportion of legal-sized biomass harvested), and (v) recruitment.

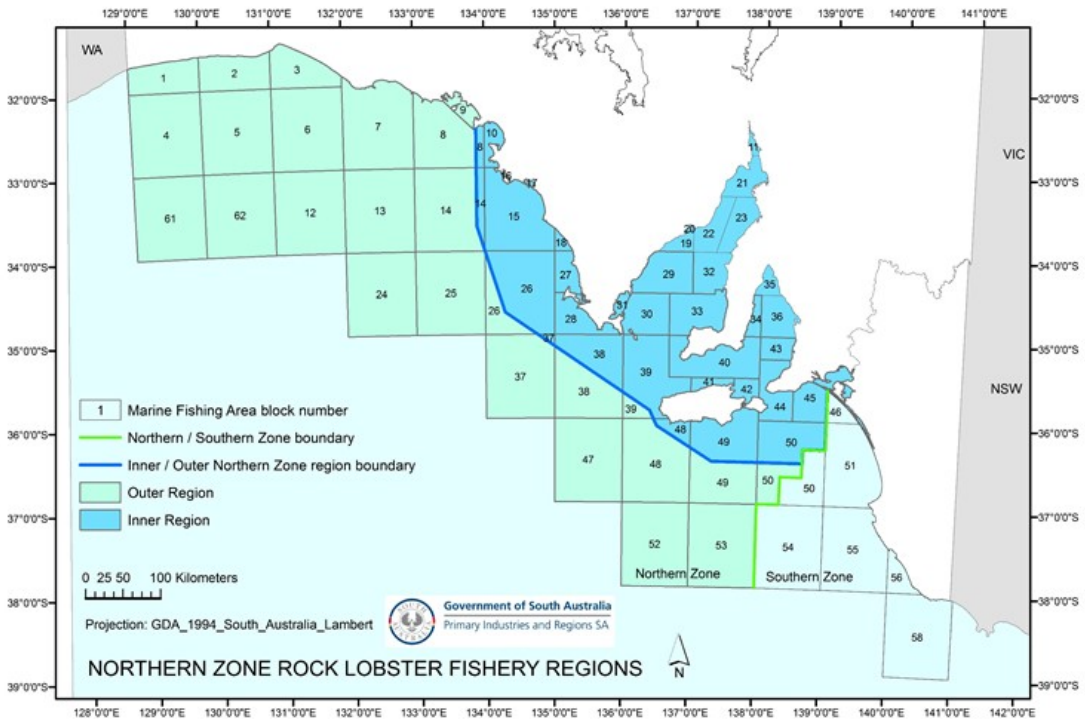

Figure 1 Northern and Southern Zones and Marine Fishing Areas (MFAs) and associated sub-regions in the South Australian Rock Lobster Fishery.

3 RESULTS

3.1 Commercial catch and effort statistics

3.1.1 Zone and Sub-region

The reported logbook catch from 1 September 2024 to 31 May 2025 was 286 t, representing 93% of the available catch (Figure 2a) By sub-region, the logbook catch was 261 t from the Inner sub-region (93% of the available catch) and 25 t from the Outer sub-region (86% of the available catch) (Table 2).

The long-term trend shows a steady decline in catch from 1999 to 2009. Although a TACC was introduced in 2003, catches remained well below the limit until 2009, when the TACC was reduced from 470 t to 310 t. (Figure 2a). Current catch levels are low by historical standards and have remained relatively stable in recent seasons.

In 2024, effort to take the catch was 190,632 potlifts—a 6% increase from 2023 (179,577 potlifts) and the third lowest on record (Figure 2a). Effort declined sharply in 2009 from 600,000 to 350,000 potlifts, then further to 287,000 in 2011. After rising to 408,000 potlifts in 2015, effort has declined steadily over the past eight seasons, with the 2024 estimate remaining among the lowest recorded.

In 2024, the legal-sized CPUE was 1.61 kg/potlift—an increase of 109% from 2016 (0.77 kg/potlift) and the highest on record ((Figure 2b). By sub-region, the pot type–adjusted catch rate in the Inner sub-region was 1.64 kg/potlift, up 98% from 2015 (0.83 kg/potlift), while the Outer sub-region recorded 0.93 kg/potlift, an 11% decrease from 2015 (1.05 kg/potlift) (Figure 3; Table 2).

In 2024, the pot type–adjusted PRI was 0.27 undersized/potlift, a 29% increase from 2023 (0.21) and above the trigger reference point (TrRP) of 0.16 undersized/potlift (Figure 2c). In the NZRLF, pre-recruits are estimated to enter the fishable biomass after about one year.

The legal-sized mean weight of lobsters has remained relatively stable since 1983 (Figure 2d). It increased from 0.97 kg in 2010 to 1.19 kg in 2016, then declined to 1.03 kg by 2020, rose to 1.11 kg in 2023, and was 1.06 kg in 2024. Fluctuations in mean weight generally reflect recruitment patterns, with lower weights following influxes of small lobsters and higher weights after several years of low recruitment.

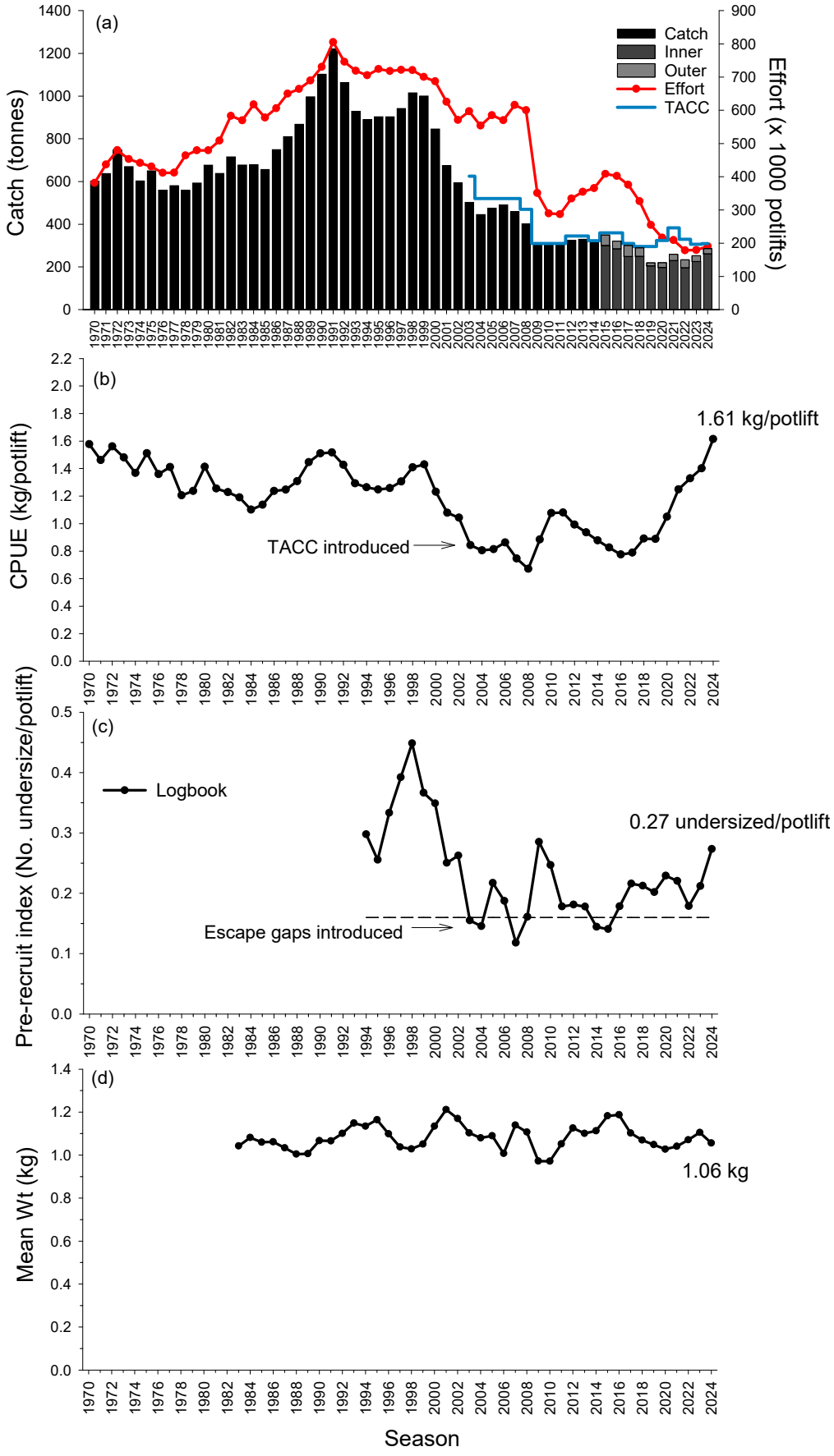

Figure 2 Fishery dependent outputs for the NZRLF. (a) Catch and effort including total allowable commercial catch (TACC+Carry-over) limit; (based on data from Nov-May) (b) catch per unit effort (CPUE); (c) pre-recruit index (PRI) including trigger reference point (dashed line) (beehive pots only) and (d) legal-sized mean weight.

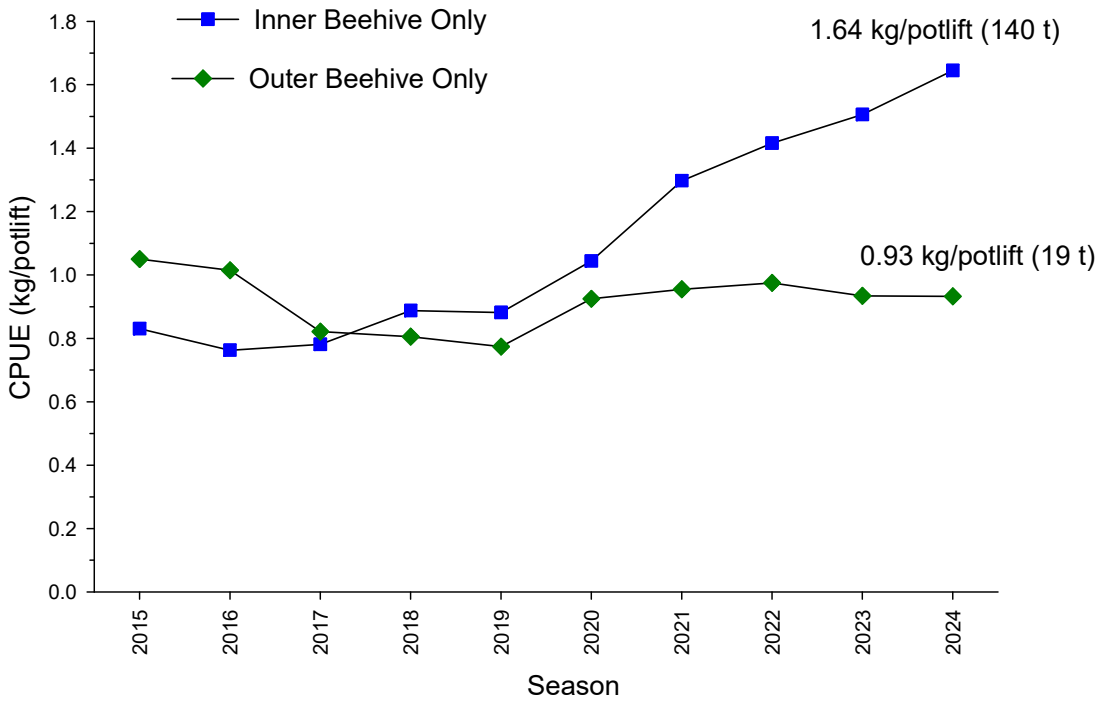

Figure 3 Catch rates by sub-region and adjusted by pot type for the NZRLF.

Table 2 Commercial catch and effort statistics for the NZRLF sub-regions based on data from September-May (all pots). *includes carry-over. CPUE based on beehive pots only.

Inner sub-region					
Season	Catch (t)	Effort (potlifts)	CPUE (kg/potlift)	Available Catch (TACC+Carry-over) (t)	Uncaught (t)
2015	301	378,667	0.83	300	0
2016	285	382,007	0.76	300	15
2017	249	319,290	0.78	250	1
2018	250	277,843	0.89	250	0
2019	205	236,457	0.88	250	45
2020	198	191,876	1.04	*263	65
2021	230	179,199	1.30	*286	56
2022	197	136,131	1.42	*261	64
2023	226	147,564	1.51	*257	31
2024	261	163,720	1.64	*280	19
Outer sub-region					
Season	Catch (t)	Effort (potlifts)	CPUE (kg/potlift)	Available Catch (TACC+Carry-over) (t)	Uncaught (t)
2015	32	34,705	1.05	60	28
2016	21	20,576	1.01	60	39
2017	47	58,889	0.82	60	13
2018	40	48,592	0.81	46	6
2019	14	18,106	0.77	46	32
2020	22	24,402	0.93	*61	39
2021	29	30,024	0.96	*97	68
2022	37	42,157	0.98	*69	32
2023	27	31,836	0.93	*49	22
2024	25	26,615	0.93	*29	4

3.1.2 Within-season trends

In general, within-season trends in catch, effort, CPUE, PRI and mean weight within the NZRLF are consistent through time (Figure 4). The highest catches are taken during spring/summer from November to January (Figure 4a) before declining thereafter.

In 2024, the highest catch occurred in January (67 t) and the lowest in September (12 t), with effort largely mirroring catch patterns (Figure 4a). Effort peaked in January (36,454 potlifts) and was lowest in May (10,141 potlifts).

Legal-sized CPUE generally tends to increase from September to December/January before decreasing thereafter (Figure 4b). In 2024, CPUE was highest in January (1.84 kg/potlift) and lowest in September (1.00 kg/potlift).

Monthly trends in catch rate of pre-recruits (i.e. PRI) have been variable in recent seasons (Figure 4c). In 2024, PRI was consistently higher across all months compared to 2023. In 2024, the PRI was highest in January (0.36 undersized/potlift) and lowest in September (0.11 undersized/potlift).

Monthly legal-sized mean weight generally increases from October/November of each season (Figure 4d). In 2024, the mean weight was lowest in November (0.93 kg) and highest in September (1.29 kg).

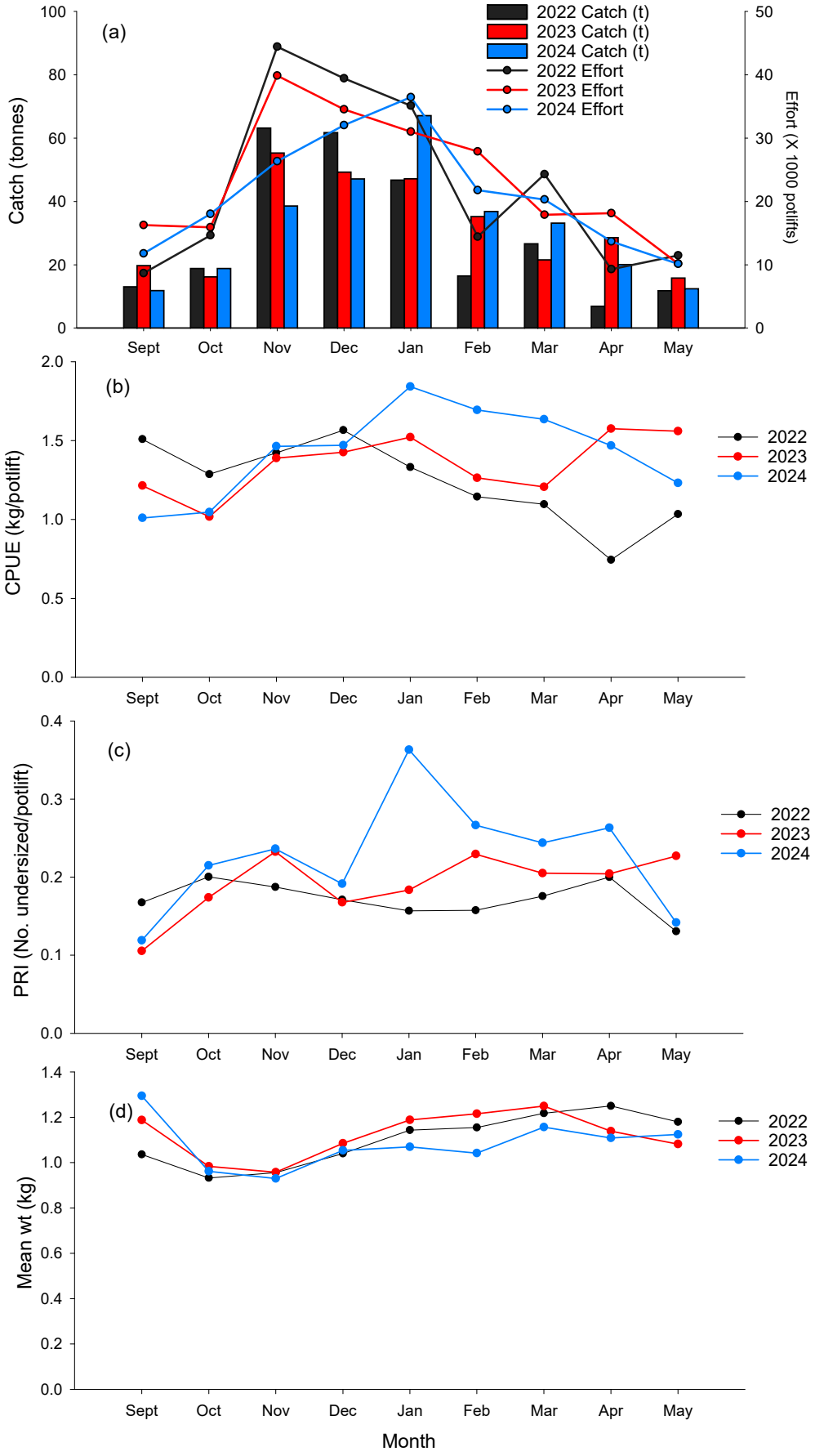

Figure 4 Within-season fishery dependent trends in the NZRLF. (a) Catch and effort; (b) catch per unit effort (CPUE); (c) pre-recruit index (PRI) (beehive pots only) and (d) legal-sized mean weight.

3.1.3 Spatial trends (MFAs)

In 2024, 94% of the catch (268 t) originated from ten MFAs (MFAs 7, 8, 15, 27, 28, 39, 40, 48, 49 and 50) (Figure 5 and Figure 6; see Figure 1 for location of MFAs). Current catch levels are now low in a historical context but have remained relatively stable across most MFAs over the last decade. In 2024, within the primary MFAs, the highest catch was taken in MFA 39 (69 t) (Figure 5e and Figure 6a) and the lowest in MFA 7 (1 t) (Figure 5a).

Effort levels largely reflected trends in catch (Figure 5 and Figure 6). In recent seasons, the highest effort has been in MFA 39 (approximately 30,000–90,000 potlifts annually over the last decade) (Figure 6a). In 2024 compared to 2023, effort decreased in all major MFAs apart from MFAs 39, 48, 49 and 50.

Trends in legal-sized annual CPUE were temporally consistent among the MFAs, with higher values occurring in the 1970s through to the late 1990s, and lows in the 2000s (Figure 5 and Figure 6). From 1999 to 2008, CPUE generally declined in most regions. More recently, following six seasons of successive decline from 2010 to 2016 and with the exceptions of MFAs 7, 8 and 15, catch rates have increased in almost all MFAs over the last 7–8 seasons.

Spatial estimates of the logbook based PRI indicate that the number of undersized/potlift is consistently lower in the north-western MFAs of 7, 8, 15, 27 and 28 (Figure 5) and higher in the south-eastern MFAs of 39, 40, 48, 49 and 50 (Figure 6). Compared to 2023, the zonal increase in PRI in 2024 was driven by all major MFAs apart from MFA 39.

Rock lobster mean weights were highest in MFAs located in the north of the NZRLF (e.g. MFA 7, 8, 15, 27) (Figure 5) and lowest in MFAs located further south (e.g. MFA 48, 49, 50) (Figure 6). In 2023 compared to 2022, the zonal decrease in legal-sized mean weight was largely driven by MFAs 8, 28, (Figure 5) 40, 49 and 50 (Figure 6).

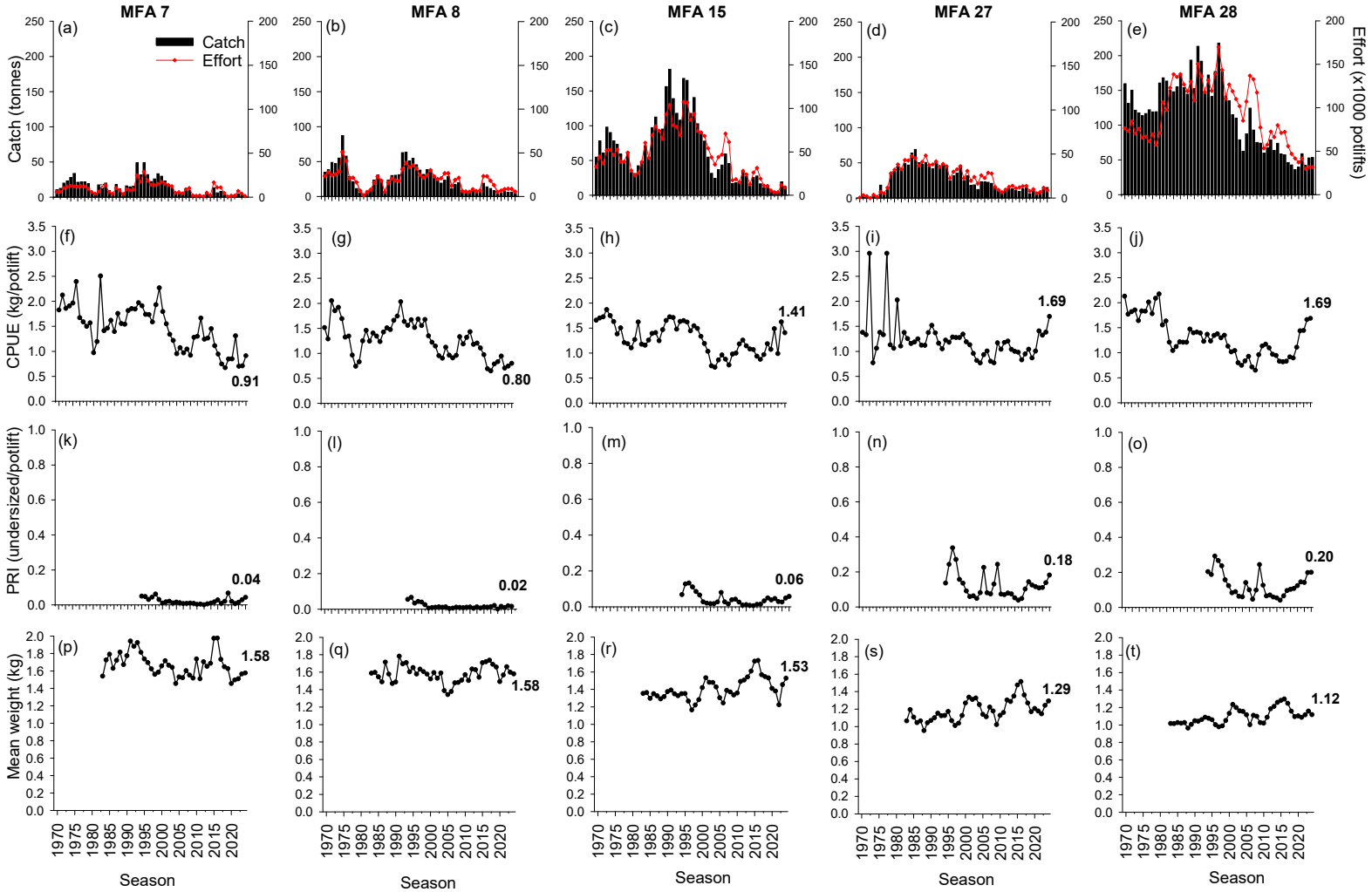

Figure 5 Spatial fishery dependent trends in the NZRLF for MFAs MFAs 7, 8, 15, 27 and 28. (a-e) Catch and effort; (f-j) catch per unit effort (CPUE); (k-o) pre-recruit index (PRI); and (p-t) mean weight.

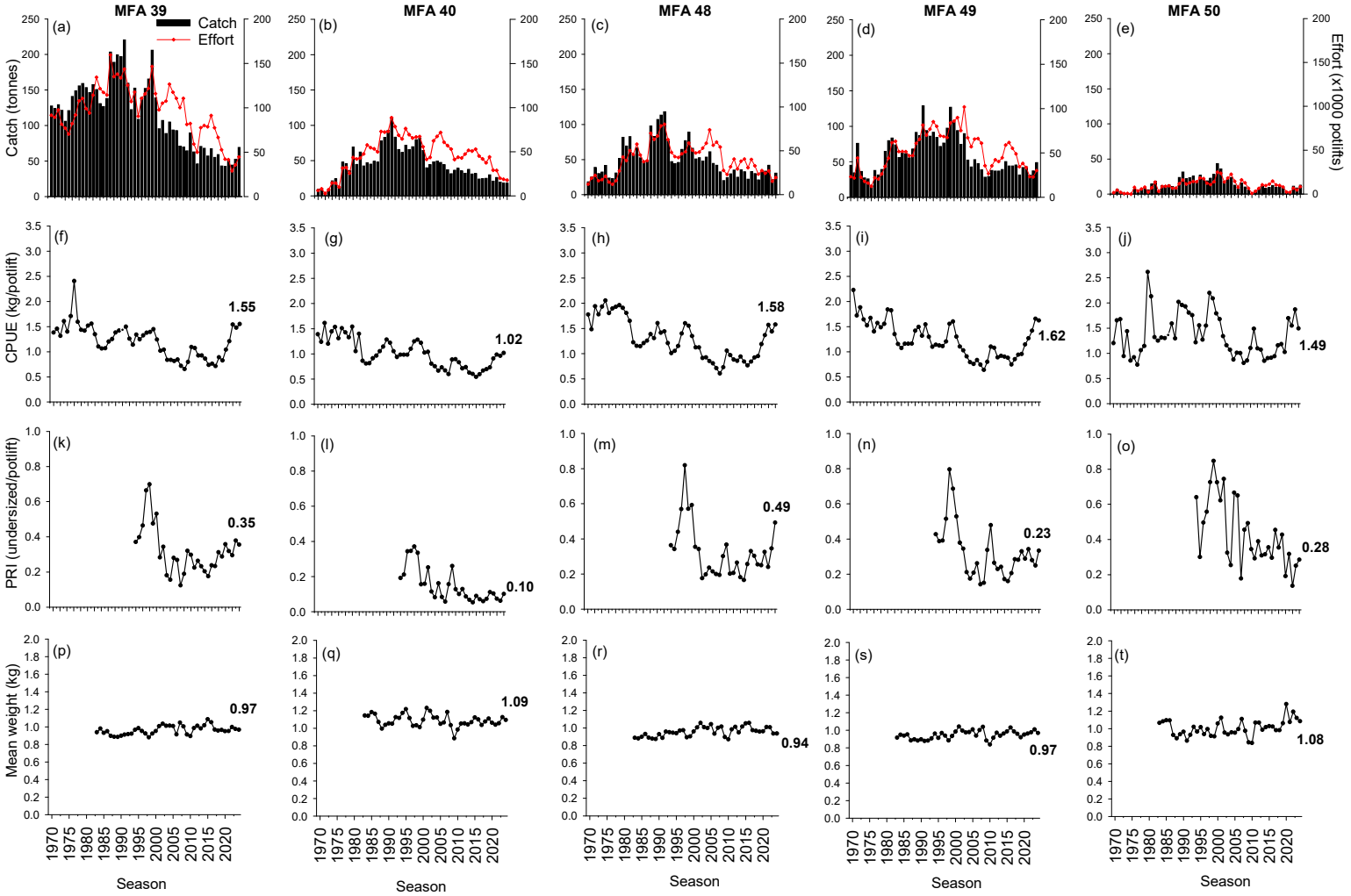

Figure 6 Spatial fishery dependent trends in the NZRLF for MFAs 39, 40, 48, 49 and 50. (a-e) Catch and effort; (f-j) catch per unit effort (CPUE); (k-o) pre-recruit index (PRI); and (p-t) mean weight.

3.1.4 Additional indices

3.1.4.1 Ovigerous (spawning) females

In 2024, the catch rate of ovigerous (spawning) female lobsters was 0.07 spawners/potlift, the highest since 1999 (Figure 7a). Notable increases catch rates have been observed over the last four seasons.

3.1.4.2 Predation mortality

The catch rate of octopus and dead lobsters are highly correlated (Figure 7b; R^2 = 0.68). In 2024, the catch rate was 0.09 dead lobsters/potlift, the highest estimate on record. High levels of mortality reflect increased catch rates of octopus. In 2024, the catch rate of octopus was 0.008 octopus/potlift, the highest since 2002.

3.1.4.3 Average days fished

In 2024, the average number of days fished per licence holder in the NZRLF was 89 days (S.D. 37 days), reflecting one of the lowest estimates on record (Figure 7c). Overall, the index is a proxy for fishing effort and largely reflects trends in annual potlifts within the fishery (Figure 2a).

3.1.4.4 High-grading

Current estimates of high-grading (the return of legal-sized lobsters to the water due to lower market value) in the NZRLF remain low ((Figure 7d). In 2024, the estimate was 4.6 t, the highest recorded to date.

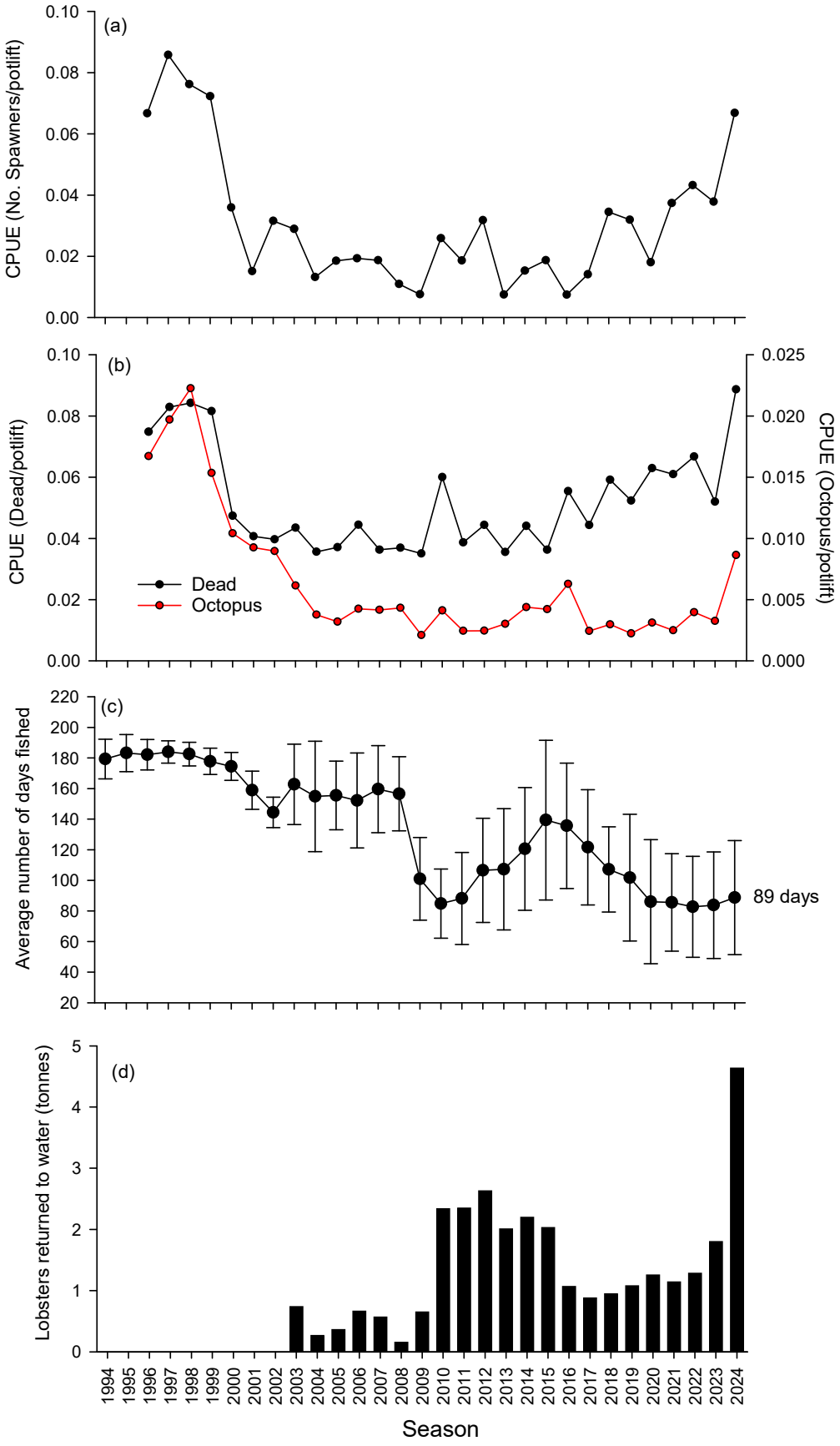

Figure 7 Additional fishery-dependent indices in the NZRLF. (a) Catch rate of spawning lobsters; (b) predation mortality and predatory octopuses; (c) average number of days fished; and (d) levels of high-grading.

3.2 Puerulus settlement index (PSI)

In 2024, the puerulus settlement index (PSI) in the NZRLF was 0.16 puerulus/collector (S.E. 0.19) which was below both the long-term average (0.43 puerulus/collector) and the median (0.38 puerulus/collector) (Figure 8). With an estimated four-year lag between settlement and recruitment, higher-than-average recruitment is expected from 2025 to 2027 based on 2021–2023 PSIs, followed by lower levels in 2028.

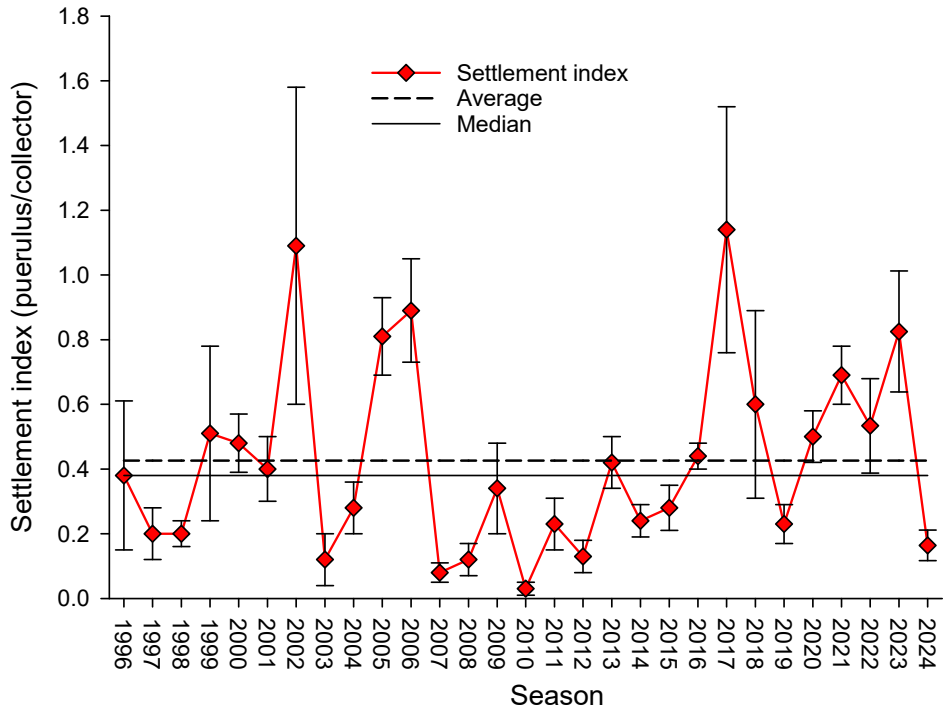

Figure 8 Puerulus settlement index (PSI) (mean±S.E.) in the NZRLF from 1996 to 2024.

3.3 Length frequency

Since 1991, up to 32,000 lobsters have been measured annually in the NZRLF through the voluntary catch sampling program, with numbers proportional to participation and expressed as lobsters per 100 potlifts.

Male lobsters, which generally grow faster and reach larger sizes than females, range between 70 and 200 mm carapace length (CL). In contrast, few females are larger than 150 mm CL. In 2024, a total of 5,322 lobsters were sampled. Of these, 67% were within the 105 to 140 mm CL range with 14% of lobsters in 2024 below the minimum legal size (MLS; 105 mm CL) (Figure 9).

Length-frequency data obtained through the voluntary catch sampling program over the last two seasons support recent trends in legal size catch rates from commercial logbook data. Notably, the percentage of lobsters measured above the MLS increased from 78% to 86% between 2020 and 2024, reflecting the increase in legal size catch rate over the same period (Figure 2b).

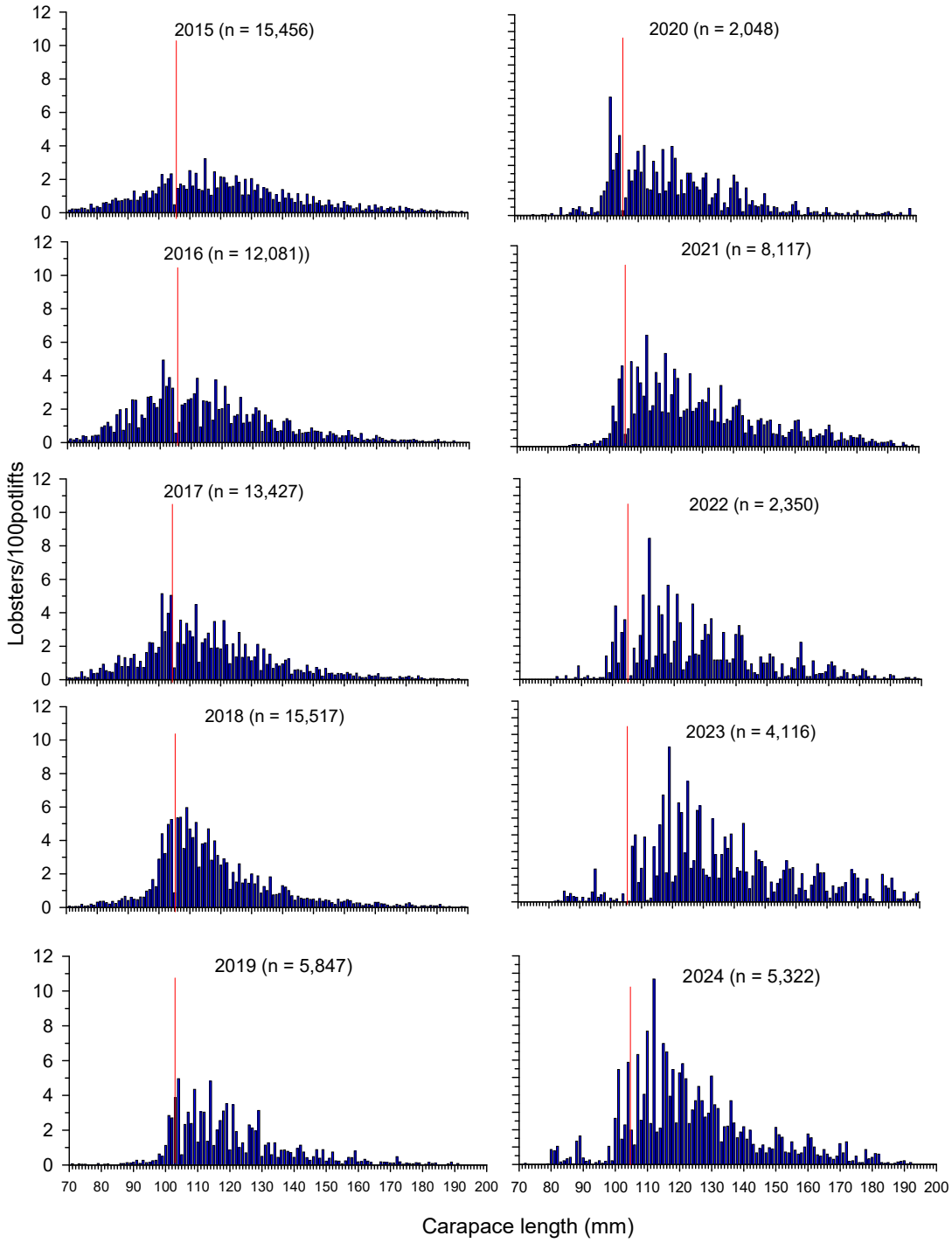

Figure 9 Length-frequency distributions of male and female lobsters combined in the NZRLF from 2015 to 2024 (red line indicates MLS at 105 mm CL).

3.4 qR Model outputs

Model outputs show long-term declines in estimated legal-size biomass from 1999 to 2008 (Figure 10a). Over the last eight seasons, estimates have increased and in 2024 was 2,192 t, the highest since 1992. In line with declines in Southern Rock Lobster biomass, egg production estimates decreased by 68% from approximately 325 billion in 1990 to 102 billion in 2008 (Figure 10b). Since 2016, estimates have increased and in 2024 was 221 billion. Current estimates equate to 18% of unfished levels (Figure 10c).

Modelled exploitation rate averaged approximately 46% from 1990 to 2008 before decreasing to 22% in 2011 (Figure 10d). Estimates then increased to 34% in 2016 before declining over the next eight seasons to 15% in 2024, the lowest on record.

Estimates from the qR model suggest that recruitment in the NZRLF is highly variable (Figure 10e). There has been a general increase in recruitment over the last nine seasons, with the 2024 estimate being 0.75 million individuals. Trends in recruitment from the qR model are highly correlated with PRI estimates from logbook data (1994-2024) ($R^2 = 0.90$).

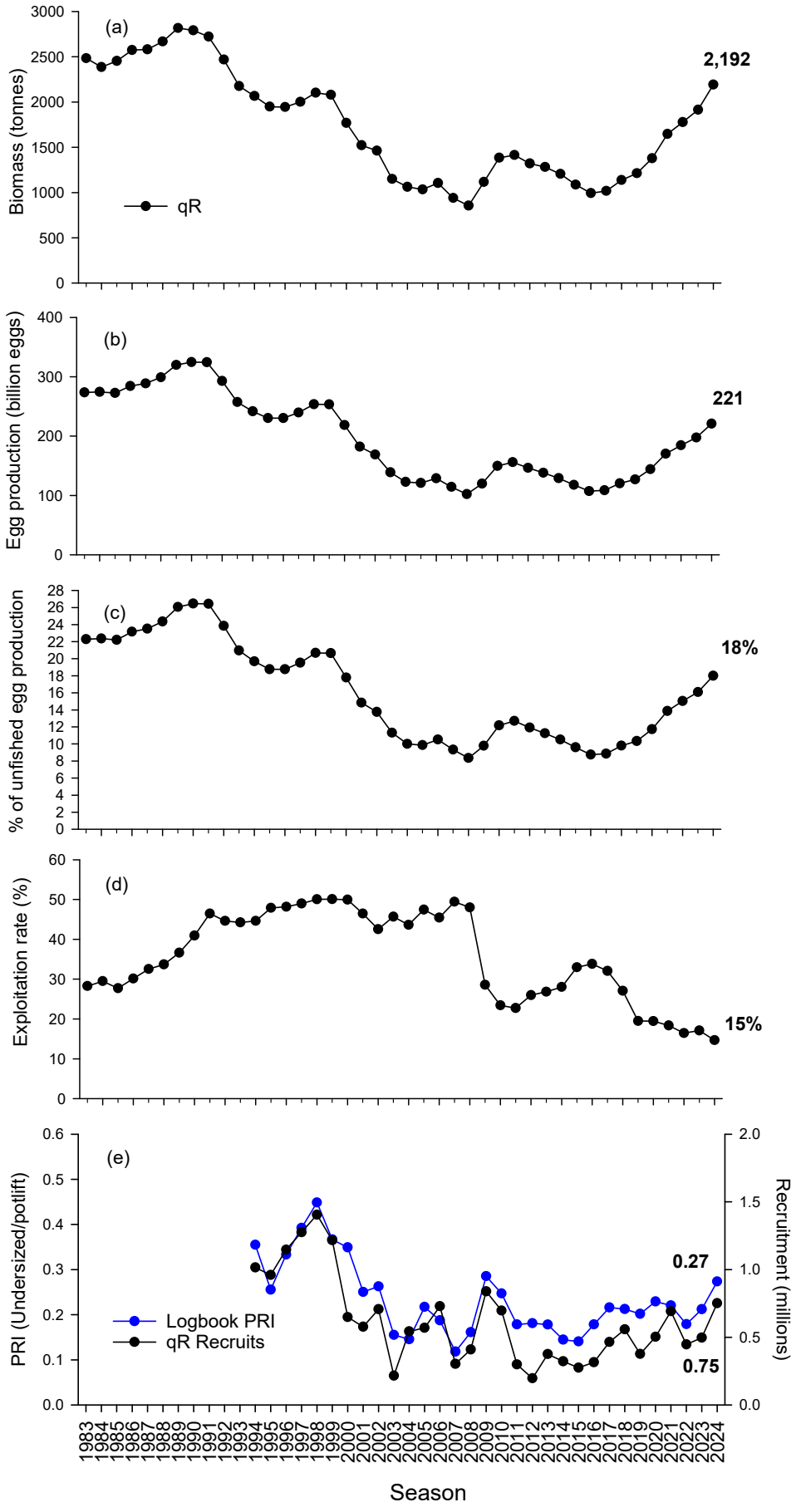

Figure 10 Fishery model outputs for the NZRLF. (a) Legal-size biomass; (b) Egg production; (c) % of unfished egg production; (d) Exploitation rate; and (e) Recruitment.

4 SUMMARY AND STOCK STATUS

At a zonal level, there is clear evidence to suggest that the status of the NZRLF has improved in recent seasons. Specifically; (i) biomass levels have increased and exploitation rate is the lowest on record; (ii) CPUE is the highest on record and above the TrRP; and (iii) the PRI is above the TrRP.

At a sub-zonal level, fishery performance is divergent between Inner and Outer sub-regions. Since spatial management was implemented in 2015, Outer sub-region catch rates have decreased. This contrasts with the Inner sub-region where catch rates have increased considerably since 2015.

The stock status classification for the NZRLF is defined in the Management Plan for the fishery (PIRSA 2021) using the primary performance indicator of CPUE (Table 3). In 2024, the CPUE was 1.61 kg/potlift, which is above the TrRP of 0.60 kg/potlift. As a result, the NZRLF stock is classified as "**sustainable**". This means that the Southern Rock Lobster biomass is at a level sufficient to ensure that, on average, future levels of recruitment are adequate and fishing mortality is adequately controlled to avoid the stock becoming recruitment impaired.

Table 3 Stock status classification for the NZRLF.

CPUE (kg/potlift)	Status
≥ 0.60	Sustainable
< 0.60	Depleting or Recovering
≤ 0.40	Depleted

5 REFERENCES

Brock, D.J. and Ward, T.M. (2004). Octopus (*Octopus maorum*) bycatch and lobster (*Jasus edwardsii*) mortality in the South Australian Rock Lobster Fishery. Fisheries Bulletin 102: 430-440.

Linnane, A., Feenstra, J., Mark, K. and Graske, D. (2025). Northern Zone Rock Lobster (Jasus edwardsii) Fishery 2023/24. Fishery Assessment Report to PIRSA Fisheries and Aquaculture. South Australian Research and Development Institute (Aquatic and Livestock Sciences), Adelaide. SARDI Publication No. F2007/000320-18. SARDI Research Report Series No. 1261. 66pp.

Linnane, A., McGarvey, R., Matthews, J., Feenstra, J., Jones, A. and Toumazos, K. (2016). Informing spatial and temporal management of the South Australian Northern Zone Southern Rock Lobster (*Jasus edwardsii*) fishery. Final Report to the Fisheries Research and Development Corporation (FRDC Project No. 2014/702). Adelaide, March.

McGarvey, R. and Matthews, J.M. (2001). Incorporating numbers harvested in dynamic estimation of yearly recruitment: onshore wind in interannual variation of South Australian rock lobster (*Jasus edwardsii*). Journal of the International Council for the Exploration of the Sea 58(5): 1092-99.

McLeay, L., Mark, K., McGarvey, R., and Linnane, A. (2023). Assessing the efficiency of alternative pot designs for the Southern Rock Lobster (*Jasus edwardsii*) fishery. South Australian Research and Development Institute (Aquatic Sciences). Project No 2016/258. Final Report to the Fisheries Research and Development Corporation. 71pp.

Piddocke, T., Ashby, C. Hartmann, K., Hesp, A., Hone, P., Klemke, J. Mayfield, S., Roelofs, A., Saunders, T., Stewart, J., Wise, B. and Woodhams J. (eds) (2021). Status of Australian fish stocks reports 2020, Fisheries Research and Development Corporation, Canberra.

PIRSA (2021). The South Australian Fisheries Management Series. Paper number 81: Management Plan for the South Australian Commercial Northern Zone Rock Lobster Fishery. ISBN 978-0-64822-04-6-6. ISSN 1322-8072.