

# Cable Yarders and Rigging Configurations in New Zealand: A 2018 Update



**Hunter Harrill & Rien Visser**

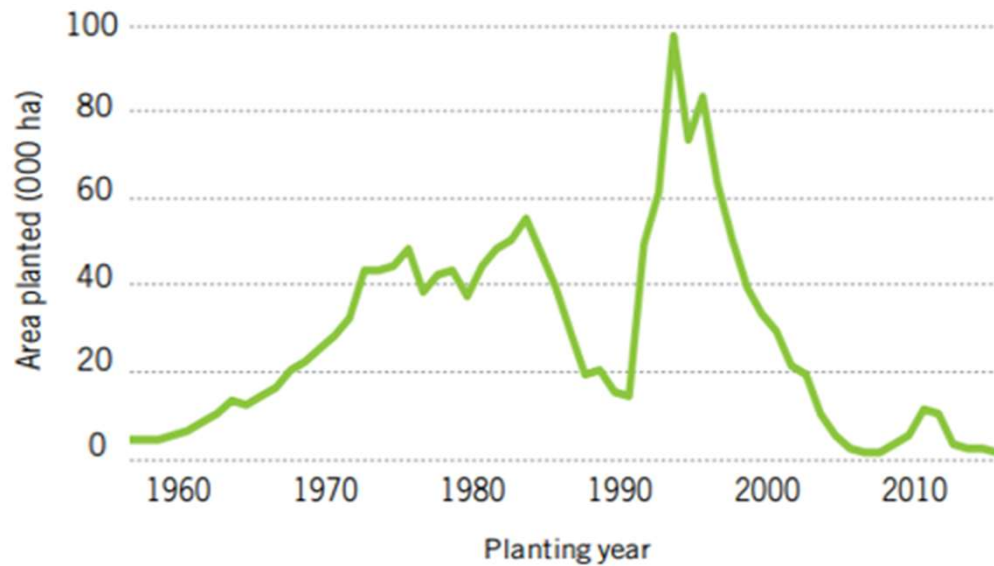
**University of Canterbury  
School of Forestry**

# Cable Logging in New Zealand

- **“Steep” harvest area is increasing 40 → 60% annual harvest**
- **Expensive & dangerous compared to ground-based systems**
  - Push to full mechanization → driving many changes
  - New technologies available (winch-assist, cameras)
- **Goal = understanding our current fleet of yarders and future industry direction**
  - What has changed since 2012 survey?



# 2018 Yarder Survey

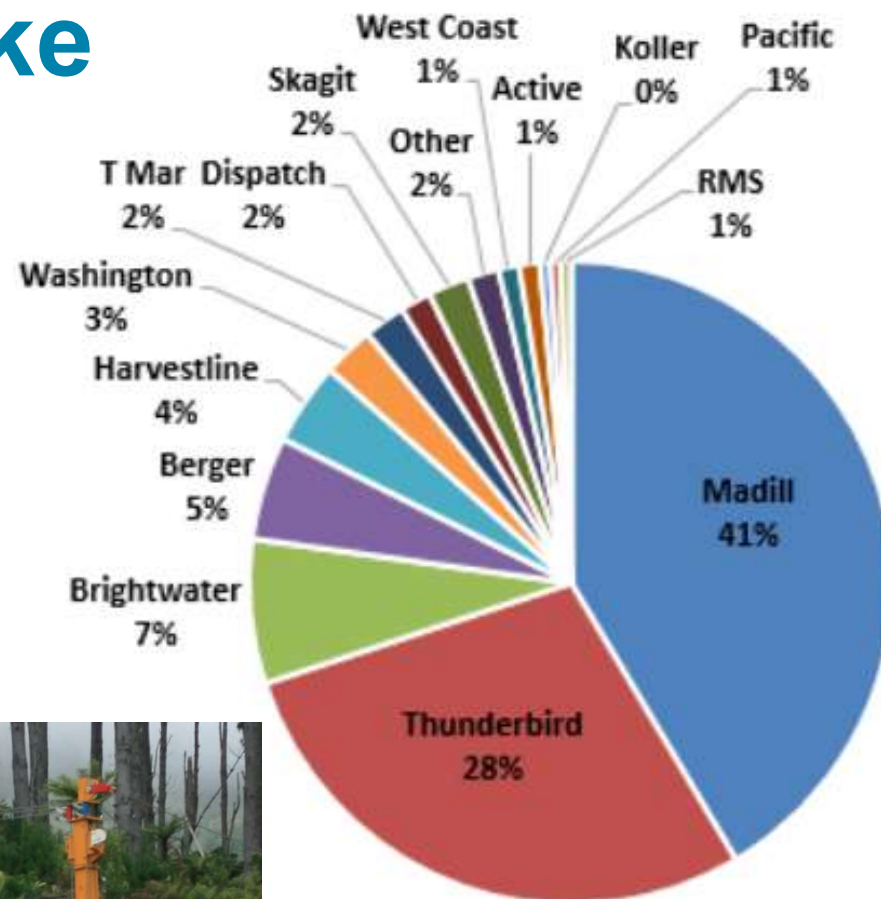


- More small woodlots...
  - >14,000 owners



# Yarder Make

- Top 5 manufacturers still the same!
- New players too



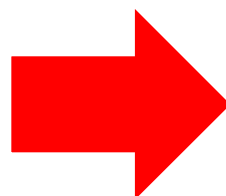
2012

# Type & Models

2018

Yarder Type	#	%
Tower	204	67%
Swing	92	30%
Excavator	9	3%
<b>Total</b>	<b>305</b>	<b>100%</b>

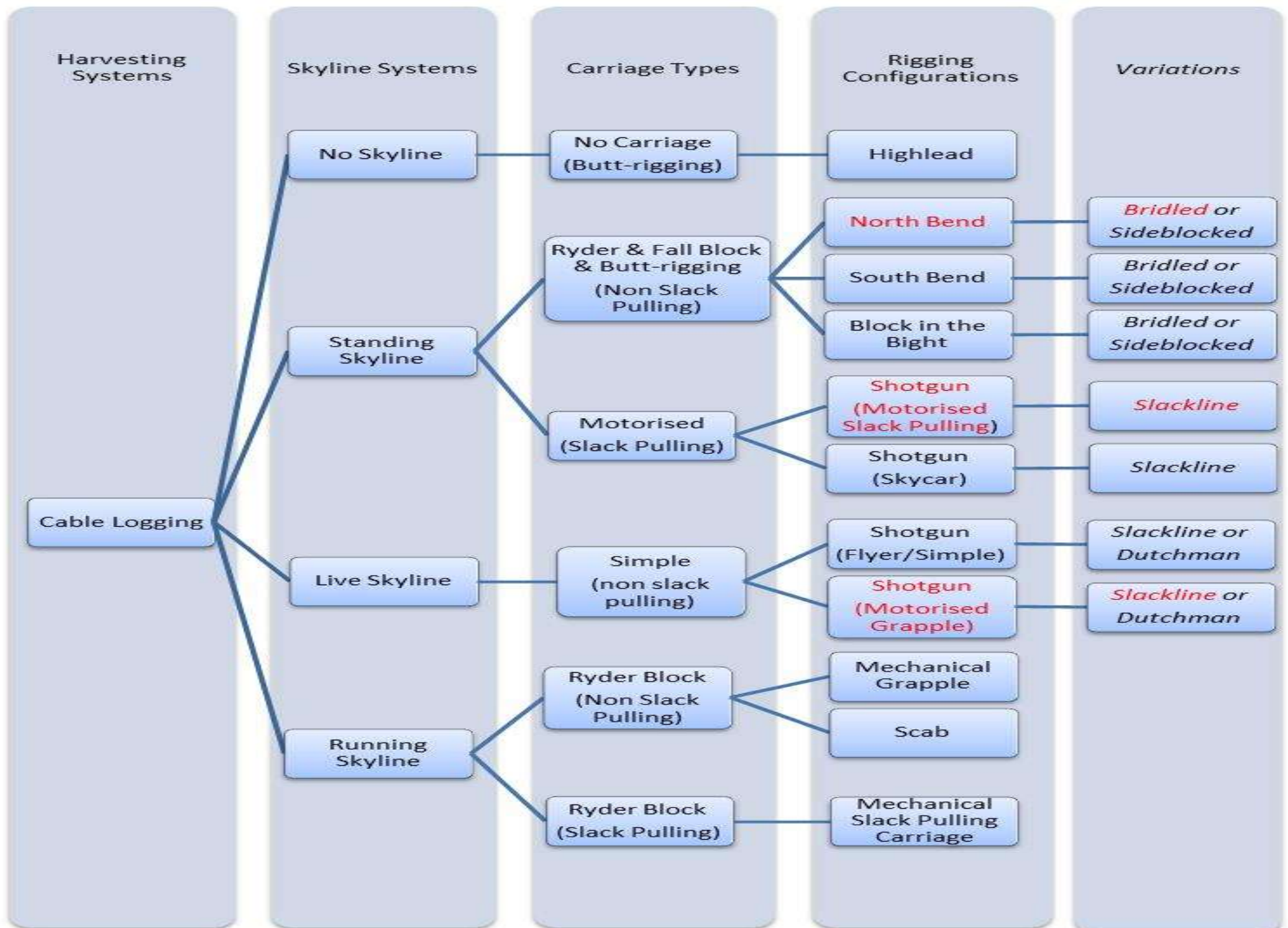
Yarder Type	#	%
Tower	108	56%
Swing	76	39%
Excavator	9	5%
<b>Total</b>	<b>193</b>	<b>100%</b>



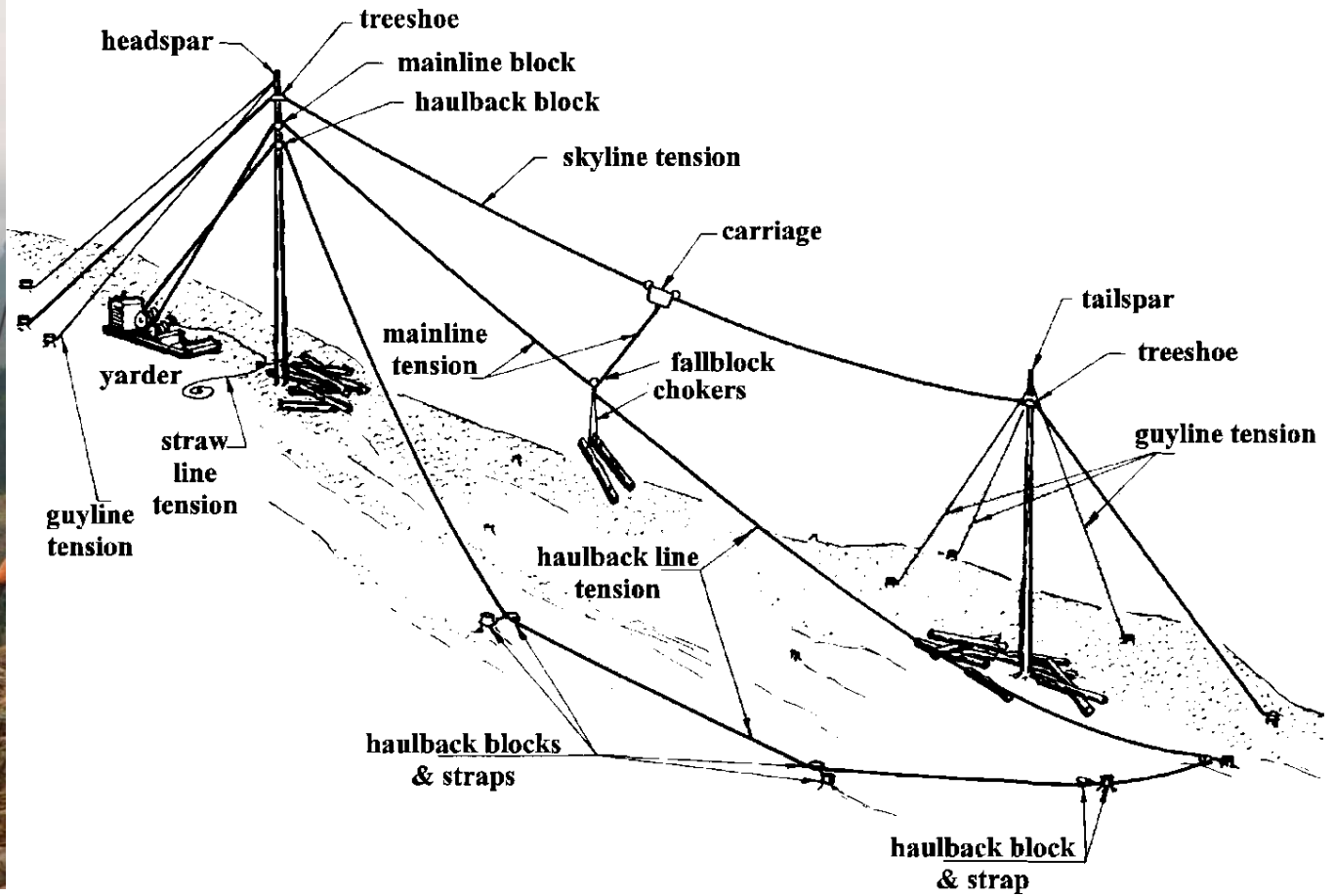
Yarder Model	#
TMY 70	31
Madill 071	26
Madill 123	18
Madill 124	17
Madill 171	17
BE70LT	13
Madill 009	13
BE85	10
TSY 255	10
Madill 122	9

Yarder Make	#
Madill 124	20
Madill 123	14
Madill 071	13
TMY 70	12
Madill 171	10
TSY 255	9
Madill 122	7
Harvestline	6
Madill 009	6
BE 70	6





# North Bend





# Motorized Carriages



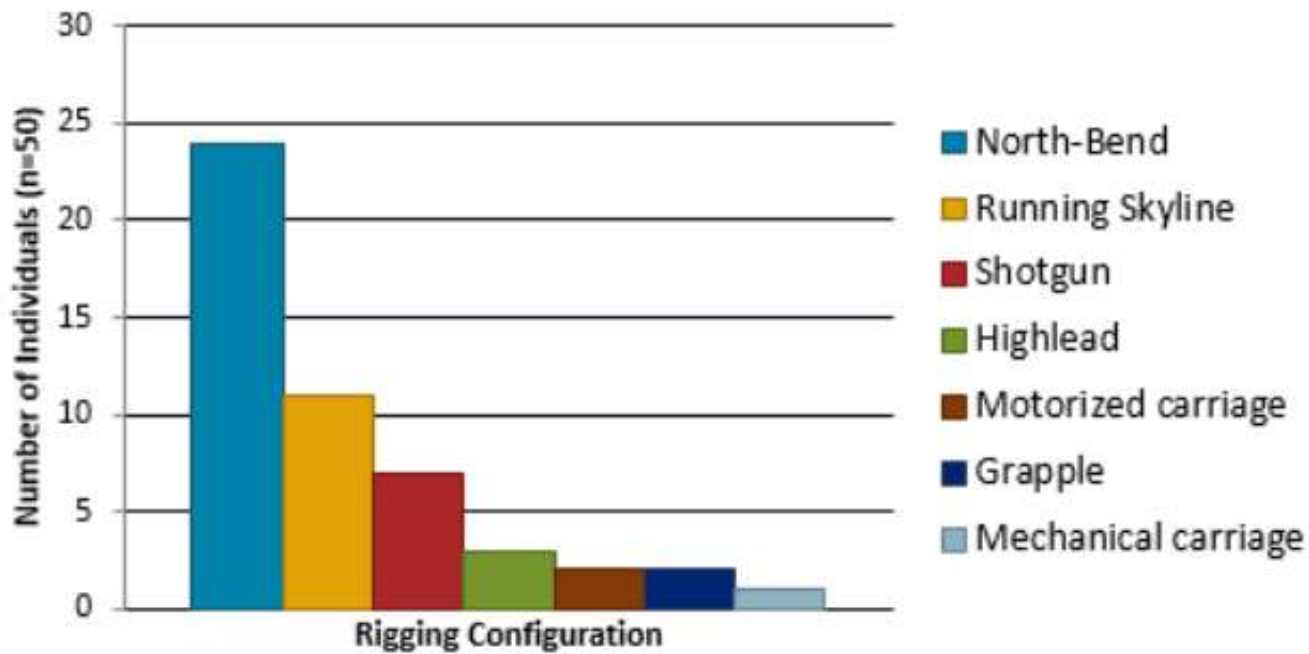


# Grapple Carriages

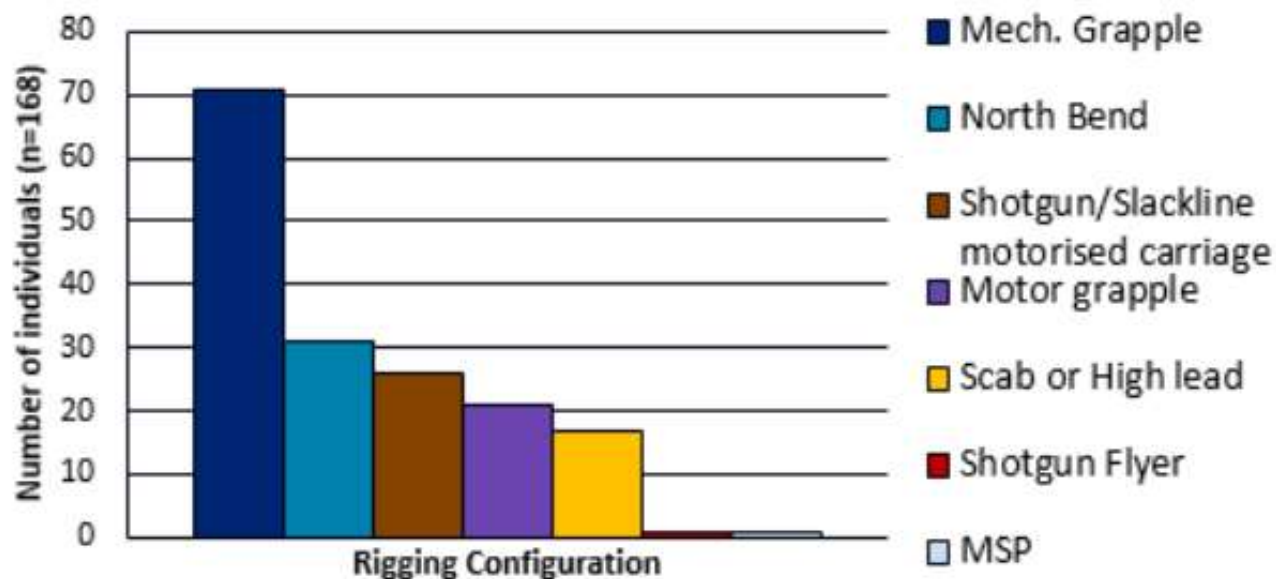
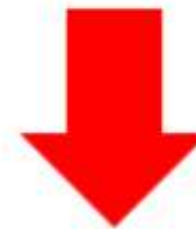




# Carriages & Rigging Configurations



**2012**  
 <30 % had access  
 to carriage



**2018**  
 50% have access  
 to carriage

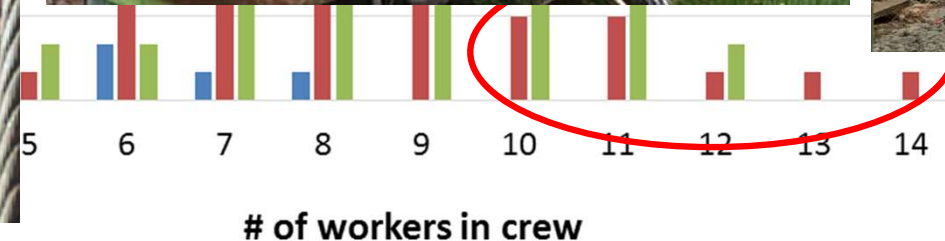
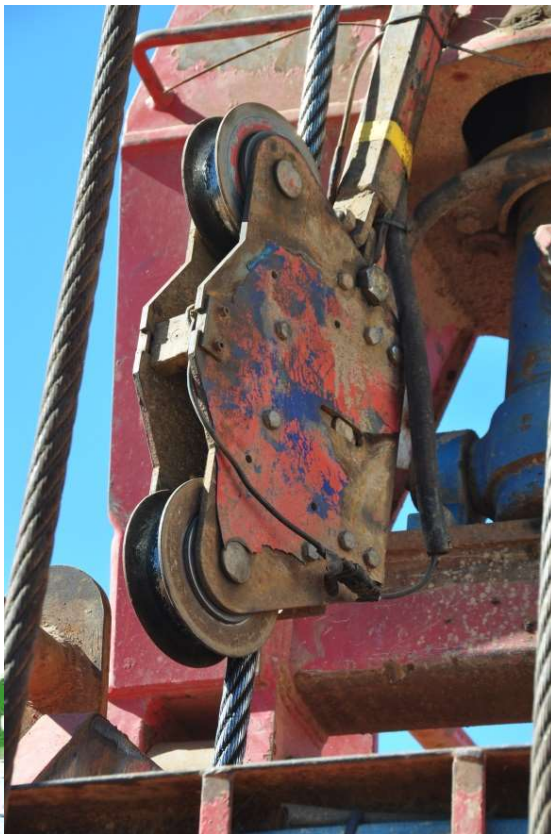


# Crew Characteristics

Tension Monitor	#	%
No	132	79
Yes	36	21
<b>Total</b>	<b>168</b>	<b>100</b>

Radio Controlled Chokers	#	%
No	106	63
Yes	62	37
<b>Total</b>	<b>168</b>	<b>100</b>

Winch-assist	#	%
No	101	56
Yes	79	44
<b>Total</b>	<b>180</b>	<b>100</b>





# Summary

- **Larger % older towers retiring**
  - Scab & Highlead
- **Swing yarder growth**
  - Higher % grappling vs scab
- **Tower carriage use increasing**
  - Motorised carriages
  - Motorised grapples
  - North Bend still common!

