# Size Limit Builder <br> Analisis pesquería barrilete FIP Oaxaca 

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## Summary

For each set of inputs, summaries of life history, selectivity, and length data are provided..

## Euthynnus lineatus | Barrilete negro | ID 1119

Title: Barrilete negro | ID 1119
Species: Euthynnus lineatus
Summary:

## Life history

| Name | Value |
| :--- | :--- |
| Length type | TL |
| Length units | cm |
| Weight units | cm |
| von Bertalanffy Loo | 52.17 |
| von Bertalanffy K | 0.47 |
| von Bertalanffy t0 | 0.21 |
| Length at 50\% maturity | 44 |
| Length increment to 95\% maturity | 1 |
| Natural mortality | 0.5 |
| M/K | 1.064 |
| Length-weight alpha | 0.0089 |
| Length-weight beta | 1.98 |
| Protogynous hermaphrodite | FALSE |

## Selectivity

| Name | Value |
| :--- | :--- |
| Selectivity | Minimum size limit or slot limit acts as selectivity |
| Landed | Minimum size limit or slot limit determines lengths landed |

Advanced analysis
Presented in cm
Spawning potential ratio contour plot


Relative yield-per-recruit contour plot


Presented in inches
Spawning potential ratio contour plot


Relative yield-per-recruit contour plot


## Retained options

For each set of inputs, summaries of any retained size limit and bag limit options are provided..

## Euthynnus lineatus｜Barrilete negro｜ID 1119

Notes：Fishing rate（ $\mathrm{F} / \mathrm{M}$ ）reported as high denotes a value of $\mathrm{F} / \mathrm{M}=2$ ．

| Option Notes | F／M | Sustainability score | Catch score | Short－term catch retention | Ranking |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Slot 44 to 56 cm TL $0 \quad$ Max length | 1.2 |  |  |  |  |
| Slot 44 to 56 cm TL $0 \quad$ Max length | 1.2 |  |  |  | いびんび |

## Length data

For each set of inputs, length data is summarized if it is included in input set.

Euthynnus lineatus | Barrilete negro | ID 1119

## Length data

Title: Datos mensuales de tallas de barrilete
Summary: Datos mensuales de barrilete obtenidos en monitoreo biológico in situ

| Parameter | Value |
| :--- | :---: |
| Length type | FL |
| Length units | cm |
| Length format | Length |
| Source | Fishery catch |
| Group | año |



## Transitional dynamics

For each set of inputs, summaries of any transitional dynamics simulations are provided.

## Euthynnus lineatus | Barrilete negro | ID 1119

## Simulation 1

## Current fishery

| Name | Value |
| :--- | :--- |
| Uncertainty range for sustainability score | $52 \%$ to $72 \%$ |
| Uncertainty range for current or defacto minimum size limit | 35 to 51 cm |

## Management option

| Name | Value |
| :--- | :--- |
| Proposed change in fishing rate | $+4 \%$ to $+24 \%$ |
| Proposed slot limit | Slot 44 to 56 cm |

Sustainability score Notes: Year refers to years after management option implementation

| Year | Mean | More likely | Less likely |
| :--- | :--- | :--- | :--- |
| 1 | 63.6 | $59.7-67.6$ | $52.6-59.7$ or $67.6-71$ |
| 3 | 57.6 | $40.8-70.3$ | $35.9-40.8$ or $70.3-76.5$ |
| 5 | 58.5 | $40.5-72.2$ | $35.9-40.5$ or $72.2-79.1$ |
| 10 | 58.8 | $40.3-72.6$ | $35.7-40.3$ or $72.6-80$ |
| 25 | 58.8 | $40.3-72.6$ | $35.7-40.3$ or $72.6-80.1$ |
| 50 | 58.8 | $40.3-72.6$ | $35.7-40.3$ or $72.6-80.1$ |

Catch score Notes: Year refers to years after management option implementation

| Year | Mean | More likely | Less likely |
| :--- | :--- | :--- | :--- |
| 1 | 50.3 | $21.3-76.2$ | $15.4-21.3$ or $76.2-117.9$ |
| 3 | 37.3 | $24.1-54.6$ | $17-24.1$ or $54.6-61.1$ |
| 5 | 37.5 | $24.5-54.2$ | $17.7-24.5$ or $54.2-61$ |
| 10 | 37.5 | $24.6-54.1$ | $17.9-24.6$ or $54.1-60.8$ |
| 25 | 37.5 | $24.6-54.1$ | $17.9-24.6$ or $54.1-60.8$ |
| 50 | 37.5 | $24.6-54.1$ | $17.9-24.6$ or $54.1-60.8$ |

Growth in relation to uncertainty range for current or defacto minimum size limit


Growth in relation to proposed slot limit




Less likely - Mean
More likely

## Report identifier

User identifier: yuliesky@smartfish.mx
Report identifier: auth0|61ba7fac27ef57007311b737-195924852

## Report sharing

Report sharing: I agree to share the results of my FishKit session with the FishKit team.
Response: No

Report type: In which contexts is the FishKit Tool being used?
Response: None selected

