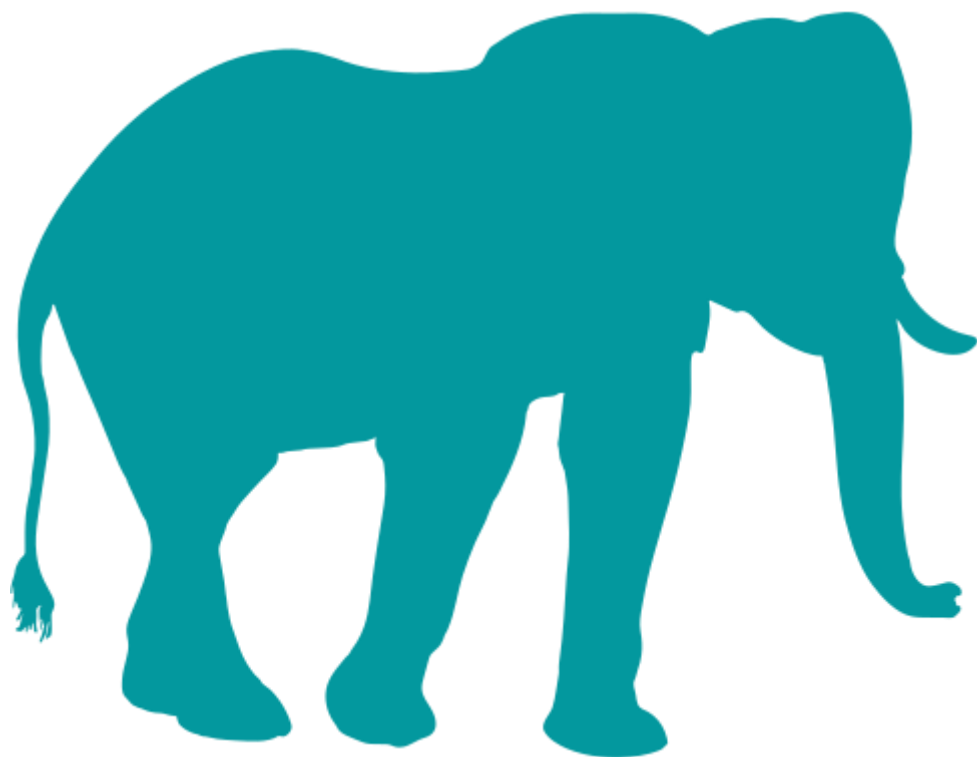


Elephant Welfare Project

Elephant Behavioural Welfare Tool

Android App Instructions

Setting up the app



www.elephantwelfareproject.org



About the App: The Science

- Elephant Behavioural Welfare Assessment Tool
- Co-produced with UK zoo staff
- Rigorous scientific development and validation^{1,2,3}
- Legislated for use in UK
- Used since 2015 by UK zoos
- Used internationally at captive elephant facilities (e.g. France, Indonesia)



¹ Yon L, Williams E, Harvey ND, and Asher L (2019). Development of a Behavioural Welfare Assessment Tool for Routine Use with Captive Elephants. PLOS ONE 14(2): e0210783. <https://doi.org/10.1371/journal.pone.0210783>.

² Williams E, Chadwick CL, Yon L and Asher L. (2018). A review of the current indicators of welfare in captive elephants (*Loxodonta africana* and *Elephas maximus*). *Animal Welfare*, 27 (3): 235-249. <https://doi.org/10.7120/09627286.27.3.235>

³ Chadwick CL, Williams E, Asher B and Yon L (2017). Incorporating stakeholder perspectives into the assessment of captive elephant welfare. *Animal Welfare*, 26 (4): 461-472.

What the tool can (and cannot) do

- Use behaviour to assess welfare (keepers/mahouts)
- Repeated, regular use
- Monitor each elephant's welfare over time
- Help identify when welfare changes (↑ or ↓)

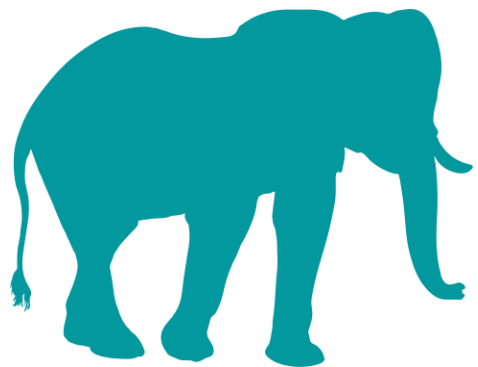
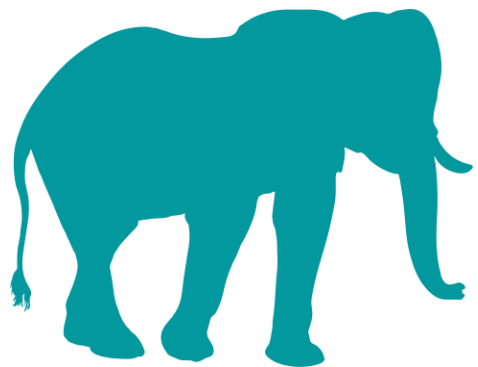


Photo credit Lisa Yon

What the tool can (and cannot) do

- Doesn't give a single number for an elephant's welfare
- Not designed to directly compare between facilities
- Okay for each facility to use differently
- Track individual elephant welfare

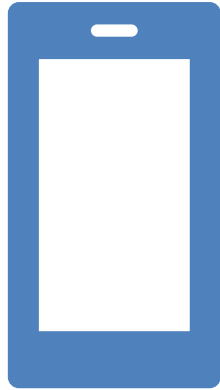


Tool helps see changes over time.....



Photo credit Lisa Yon

About the App



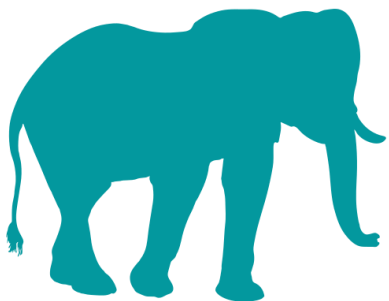
Device type



How Often



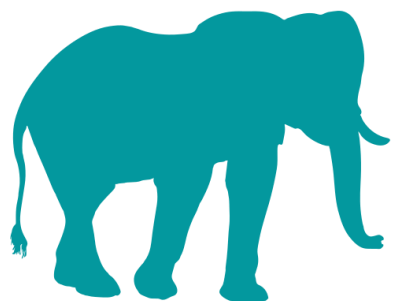
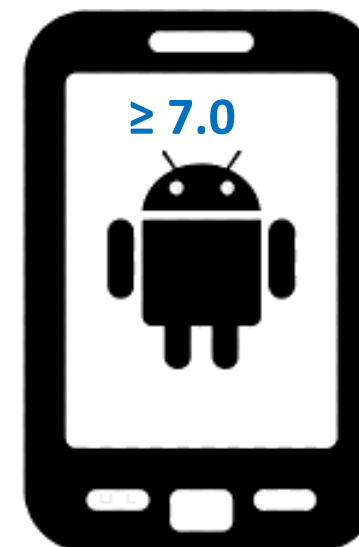
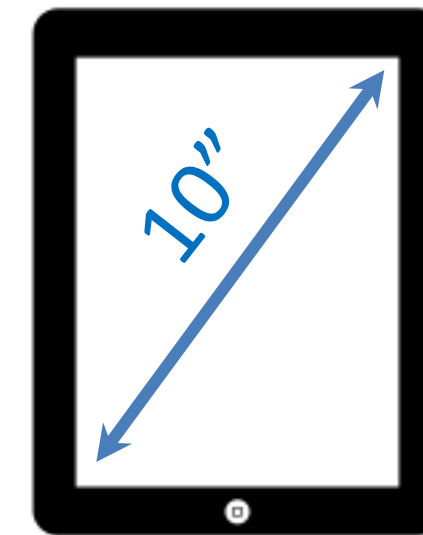
Information on
changes



How to Use This App

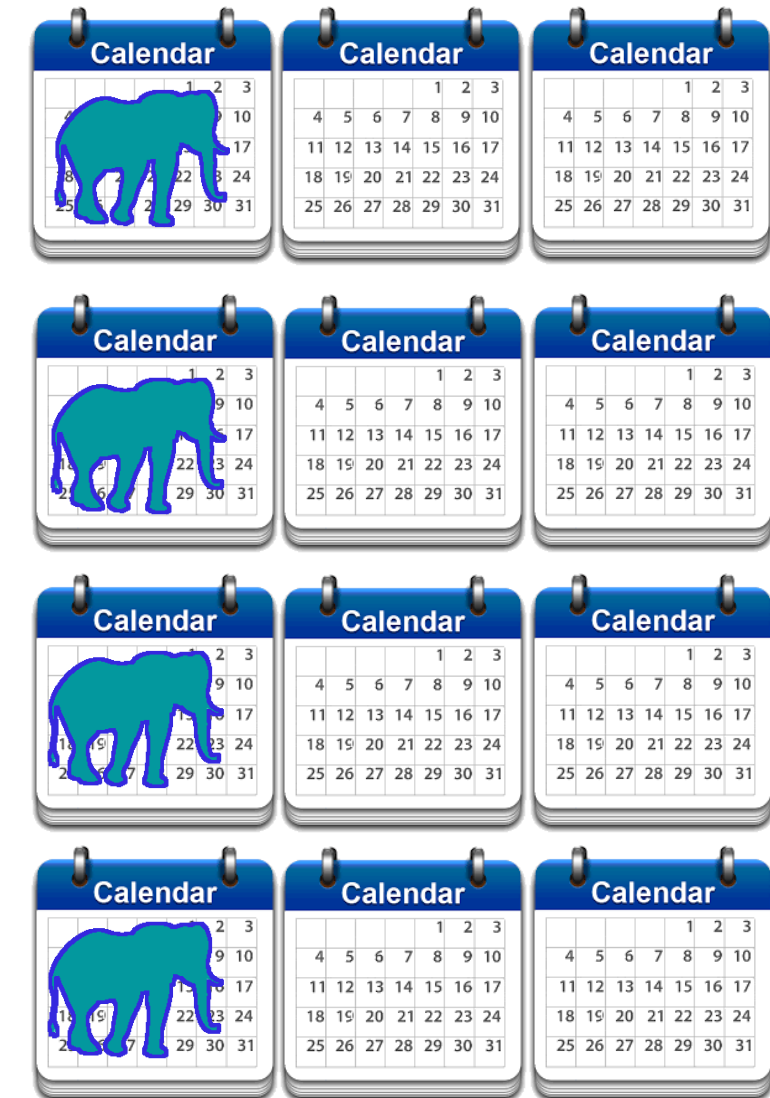
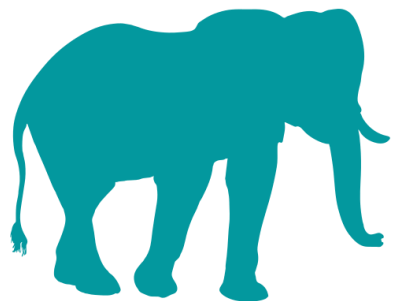
Device Type

- **Android Tablet (not phone)**
- Screen size $\geq 10''$
- Android 7.0 or later



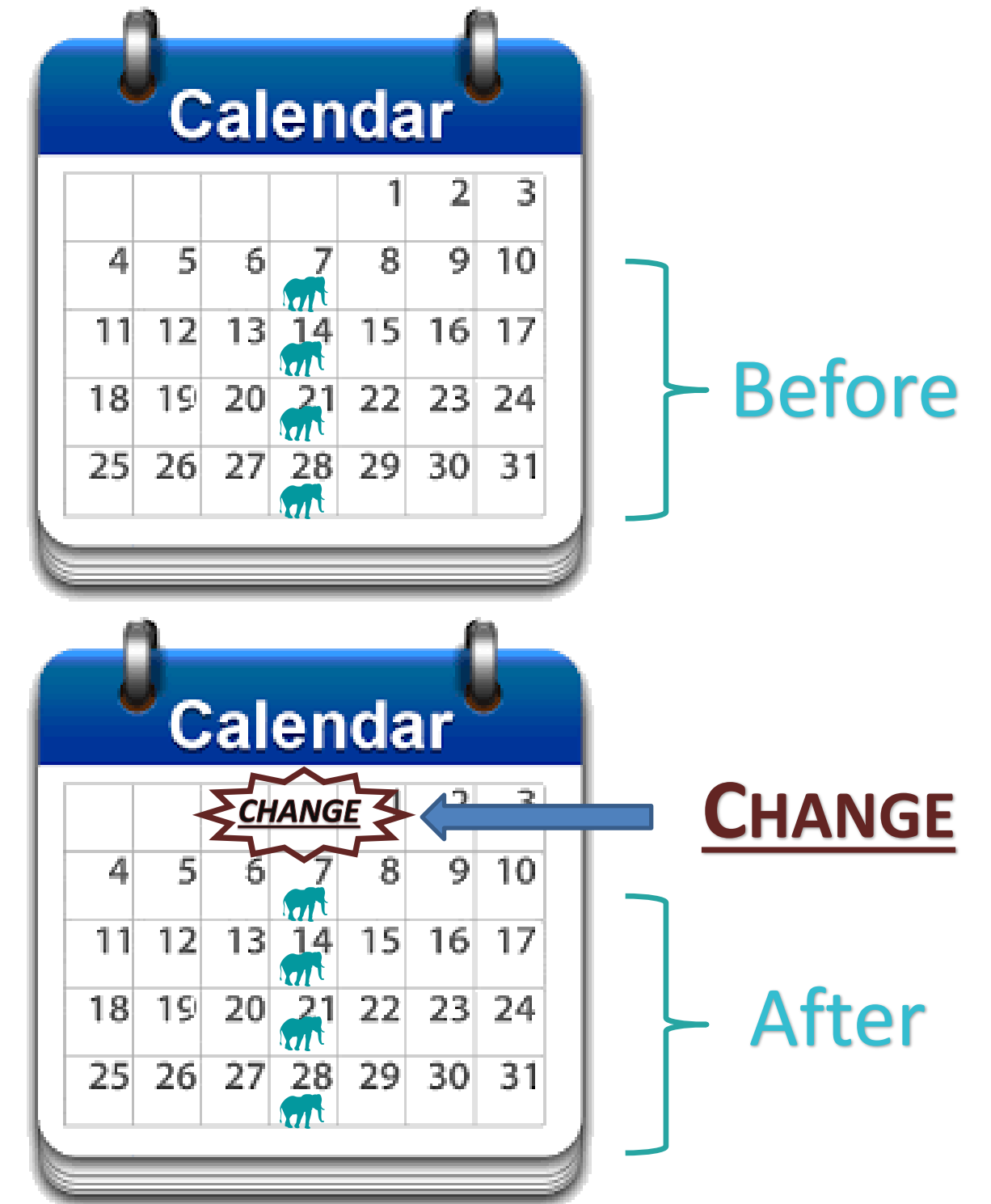
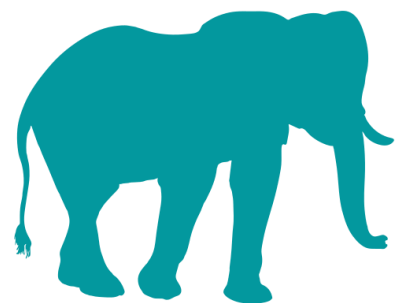
How Often?

- App purpose: Measure changes in welfare
- Use at least **every three (3) months**
- More often when a change happens
 - Husbandry
 - Health
 - Facilities
 - Elephants (death, birth, elephant moves)
 - Any other change that might affect your elephant...



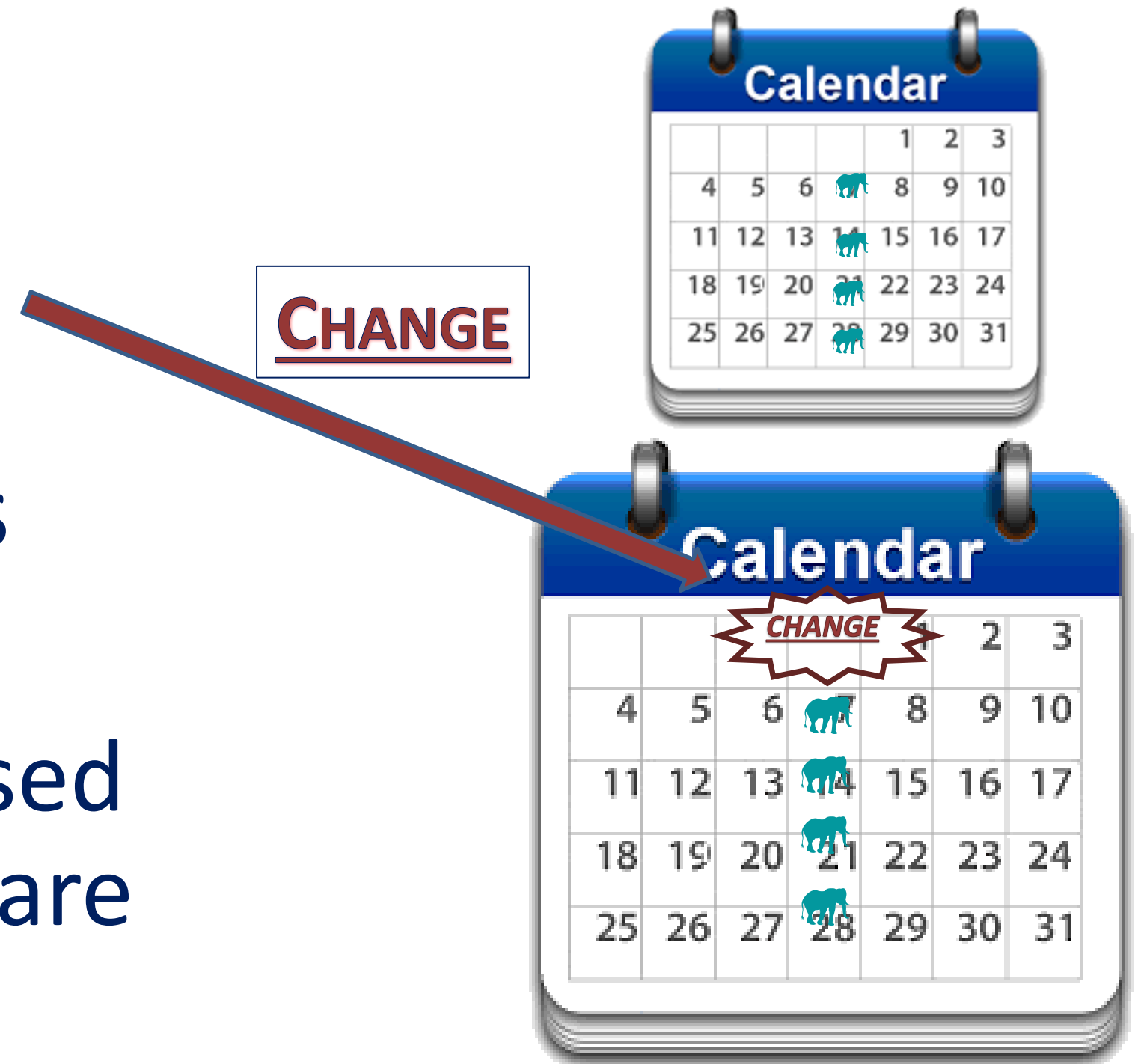
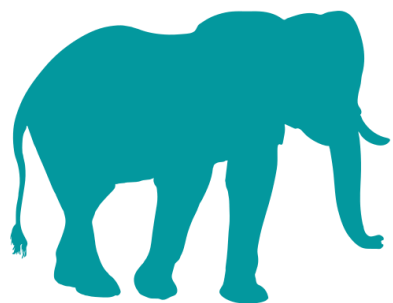
Change = Use App More Often

- Before change (if planned):
every week (for 3-4 weeks)
- After change:
every week (for 3-4 weeks)
- Submit details about the change
on app



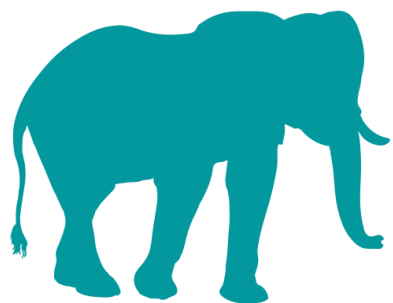
Change Details onto the App

- **What** (details)
- **When** (first happened)
- **Very important** to submit this information
 - Purpose of app: tell you if caused any changes in elephant's welfare



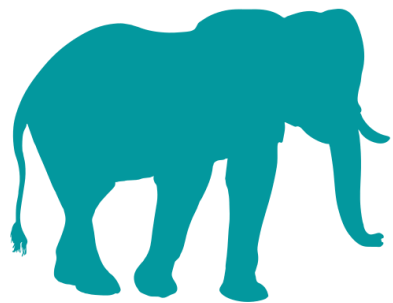
How to set up the app

- Add your collection details
- Add details about your elephants
- Add details about the assessors
- Tour of the home screen



First

How to add your collection details





Please register your institution to start
using the Elephant Behavioural Welfare
Assessment Tool

Institution Name

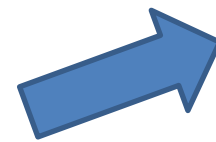
Name (Point of contact)

Email Address (Point of contact)

Phone Number (Point of contact)



Please register your institution to start
using the Elephant Behavioural Welfare
Assessment Tool



Institution Name

Name (Point of contact)

Email Address (Point of contact)

Phone Number (Point of contact)



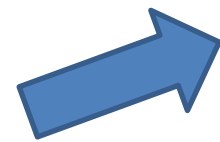
Please register your institution to start
using the Elephant Behavioural Welfare
Assessment Tool

Institution Name

Name (Point of contact)

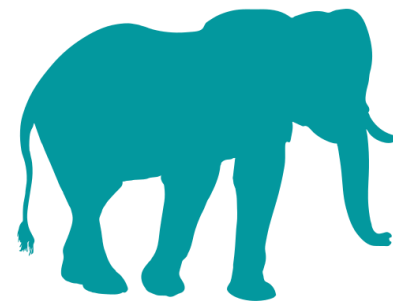
Email Address (Point of contact)

Phone Number (Point of contact)



Second

How to add details about your elephants



 ELEPHANTS  ASSESSORS

Start by selecting the 'add elephant' button to add all elephants within your Institution



+ ADD ELEPHANT

Add Elephant Information

Elephant Name

Chiang Lek

Studbook Number

112233

Sex

☐ Male ☒ Female

Genus

☐ African ☒ Asian

Date Born

☐ Known ☒ Estimated

Day

1

Month

1

Year

1975

Date Entered Captivity

☐ Known ☒ Estimated

Day

5

Month

4

Year

1989

Date Arrived At Current Institution

☒ Known ☐ Estimated

Day

23

Month

8

Year

2003

Health Concerns

Sex

☐ Male

☒ Female

Genus

☒ African

☐ Asian

Date Born

☒ Known

☐ Estimated

Day

03

Month

06

Year

2005

Date Entered Captivity

☒ Known

☐ Estimated

Day

03

Month

06

Year

2005

Date Arrived At Current Institution

☒ Known

☐ Estimated

Day

03

Month

06

Year

2005

Health Concerns

none

Select any related elephants to the focal elephant from the list below, indicating what relationship this new elephant is to the focal elephant.

☐ Grey Mystery

☐ Smoke

+

ADD NEW FAMILY MEMBER

SAVE

Sex

☐ Male

☒ Female

Genus

☒ African

☐ Asian

Date Born

☒ Known

☐ Estimated

Day03

Month06

Year2005

Date Entered Captivity

☒ Known

☐ Estimated

Day03

Month06

Year2005

Date Arrived At Current Institution

☒ Known

☐ Estimated

Day03

Month06

Year2005

Health Concerns

none

Select any related elephants to the focal elephant from the list below, indicating what relationship this new elephant is to the focal elephant.

- ☐ Grey Mystery
- ☐ Smoke



+

ADD NEW FAMILY MEMBER

SAVE



Elephant Name

Chiang Lek

Studbook Number

112233

Sex

☐ Male ☒ Female

Genus

☐ African ☒ Asian

Date Born

☐ Known ☒ Estimated

Date Entered Captivity

☐ Known ☒ Estimated

Date Arrived At Current Institution

☒ Known ☐ Estimated

Health Concerns

Lame right hind, chronic foot

Add New Family Member

Elephant Name

Grey Mystery

Studbook Number

3344556

Sex

☐ Male ☒ Female

Genus

☐ African ☒ Asian

Date Born

☐ Known ☒ Estimated

Day

1

Month

5

Year

1986

Date Entered Captivity

☐ Known ☒ Estimated

Day

1

Month

5

Year

1992

Date Arrived At Current Institution

☒ Known ☐ Estimated

Day

10

Month

3

Year

1998

Health Concerns

none



Add New Family Member

Elephant Name
Grey Mystery

Studbook Number
3344556

Sex
☐ Male ☒ Female

Genus
☐ African ☒ Asian

Date Born
☐ Known ☒ Estimated

Day	Month	Year
1	5	1986

Date Entered Captivity
☐ Known ☒ Estimated

Day	Month	Year
1	5	1992

Date Arrived At Current Institution
☒ Known ☐ Estimated

Day	Month	Year
10	3	1998

Health Concerns
none





Elephant Name

Chiang Lek

Studbook Number

112233

Sex

☐ Male

☒ Female

Genus

☐ African

☒ Asian

Date Born

☐ Known

☒ Estimated

Date Entered Captivity

☐ Known

☒ Estimated

Date Arrived At Current Institution

☒ Known

☐ Estimated

Health Concerns

Lame right hind, chronic foot

Elephant Name

Smoke

Studbook Number

665544

Sex

☒ Male

☐ Female

Genus

☐ African

☒ Asian

Date Born

☒ Known

☐ Estimated

Day

15

Month

6

Year

2012

Date Entered Captivity

☒ Known

☐ Estimated

Day

15

Month

6

Year

2012

Date Arrived At Current Institution

☒ Known

☐ Estimated

Day

15

Month

6

Year

2012

Health Concerns

none



CANCEL

SAVE

Sex

☐ Male

☒ Female

Genus

☒ African

☐ Asian

Date Born

☒ Known

☐ Estimated

Day

03

Month

06

Year

2005

Date Entered Captivity

☒ Known

☐ Estimated

Day

03

Month

06

Year

2005

Date Arrived At Current Institution

☒ Known

☐ Estimated

Day

03

Month

06

Year

2005

Health Concerns

none

Select any related elephants to the focal elephant from the list below, indicating what relationship this new elephant is to the focal elephant.

☒ Grey Mystery

←

Relationship

▼

☐ Smoke

+ ADD NEW FAMILY MEMBER

SAVE

Sex

☐ Male

☒ Female

Genus

☒ African

☐ Asian

Date Born

☒ Known

☐ Estimated

Day

03

Month

06

Year

2005

Date Entered Captivity

☒ Known

☐ Estimated

Day

03

Month

06

Year

2005

Date Arrived At Current Institution

☒ Known

☐ Estimated

Day

03

Month

06

Year

2005

Health Concerns

none

Select any related elephants to the focal elephant from the list below, indicating what relationship this new elephant is to the focal elephant.

☒ Grey Mystery

Relationship

▼

☐ Smoke

←

+

ADD NEW FAMILY MEMBER

SAVE

- Mother
- Father
- Daughter
- Son
- Brother
- Sister
- Grandmother
- Grandfather
- Granddaughter
- Grandson
- Aunt
- Uncle
- Cousin

Relationship

☐ Smoke

+ ADD NEW FAMILY MEMBER

SAVE

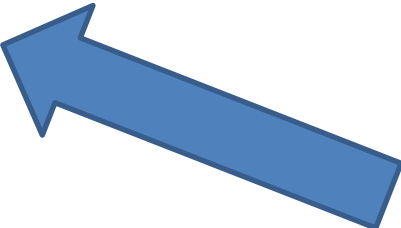
Day	Month	Year
03	06	2005

Day	Month	Year
03	06	2005

Day	Month	Year
03	06	2005

--	--	--

elephant from the list below, indicating what local elephant.



Father

Daughter

Son

Brother

Sister

Grandmother

Grandfather

Granddaughter

Grandson

Aunt

Uncle

Cousin

Relationship

☐ Smoke[+ ADD NEW FAMILY MEMBER](#)

SAVE

Day

03

Month

06

Year

2005

Day

03

Month

06

Year

2005

Day

03

Month

06

Year

2005

elephant from the list below, indicating what
local elephant.

☒ Male ☒ Female

Genus

☒ African ☐ Asian

Date Born

☒ Known ☐ Estimated

Day

03

Month

06

Year

2005

Date Entered Captivity

☒ Known ☐ Estimated

Day

03

Month

06

Year

2005

Date Arrived At Current Institution

☒ Known ☐ Estimated

Day

03

Month

06

Year

2005

Health Concerns

none

Select any related elephants to the focal elephant from the list below, indicating what relationship this new elephant is to the focal elephant.

☒ Grey Mystery

Relationship

Mother

☐ Smoke

Date Arrived At Current Institution

☒ Known ☐ Estimated

Day
03

Month
06

Year
2005

Health Concerns

none

Date of Death / Departure

Additional Information Regarding Death / Departure

Select any related elephants to the focal elephant from the list below, indicating what relationship this new elephant is to the focal elephant.

☒ Grey Mystery

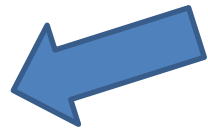
Relationship
Mother

☐ Smoke

☐ Rain

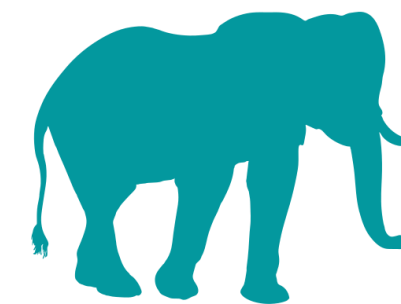
+ ADD NEW FAMILY MEMBER

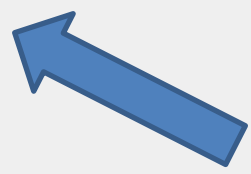
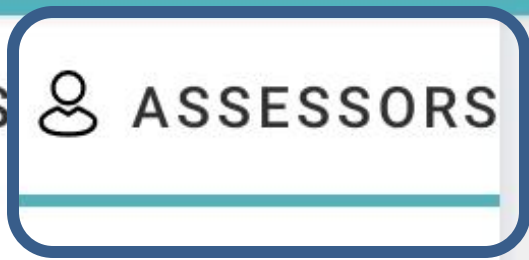
SAVE



Next

How to add details about the assessors





Start by selecting the 'add assessor' button to add all assessors within your Institution

+ ADD ASSESSOR



Start by selecting the 'add assessor' button to add all assessors within your Institution



+ ADD ASSESSOR



Add Assessor Information

Assessor Name

Mary Phillips

Title / Role

Head Keeper

No. of Years Working With Elephants

16 years

No. of Years Working At Institution

3 years

Please enter email address and/or phone number.

Email Address

mphillips@gmail.com

Phone Number

07712345678

SAVE

Add Assessor Information

Assessor Name

Mary Phillips

Title / Role

Head Keeper

No. of Years Working With Elephants

16 years

No. of Years Working At Institution

3 years

Please enter email address and/or phone number.

Email Address

mphillips@gmail.com

Phone Number

07712345678

SAVE





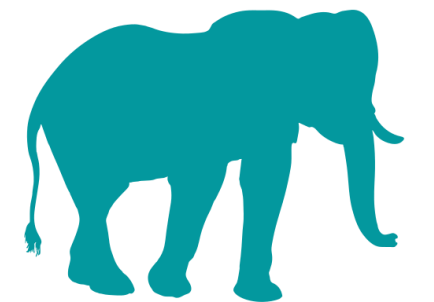
Start by selecting the 'add assessor' button to add all assessors within your Institution



+ ADD ASSESSOR

Finally

A quick tour of the home screen.



 ELEPHANTS

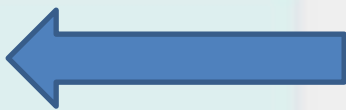
 ASSESSORS

Grey Mystery

Smoke

Chiang Lek

Rain



+ ADD ELEPHANT

Grey Mystery

(3344556)  EDIT

Sex	Genus	Date Born
Female	Asian	1/5/1986 (Estimated)
Date Entered Captivity		Date Arrived At Current Institution
1/5/1992 (Estimated)		10/3/1998 (Known)
Date of Death / Departure		Additional Info About Departure
DD/MM/YYYY		N/A

Related Elephants At Your Collection

Daughter	Son
Chiang Lek	Rain

 VIEW SUMMARY OF HEALTH

Assessment Results

Enter more assessment data to view the assessment results

ASSESSMENTS

All sections should be completed within one week (7 consecutive days)

Section A

Qualitative Behavioural Assessment

✓ COMPLETE

Section B

Daytime activity

ENTER ASSESSMENT

Section C

Night-time activity

✓ COMPLETE

 ELEPHANTS

 ASSESSORS

Grey Mystery



Smoke

Chiang Lek

Rain

+ ADD ELEPHANT

Grey Mystery

(3344556)  EDIT

Sex	Genus	Date Born
Female	Asian	1/5/1986 (Estimated)
Date Entered Captivity		Date Arrived At Current Institution
1/5/1992 (Estimated)		10/3/1998 (Known)
Date of Death / Departure		Additional Info About Departure
DD/MM/YYYY		N/A

Related Elephants At Your Collection

Daughter	Son
Chiang Lek	Rain

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Section A

Qualitative Behavioural Assessment

 COMPLETE

Section B

Daytime activity

ENTER ASSESSMENT

Section C

Night-time activity

 COMPLETE

Grey Mystery

Smoke

Chiang Lek

Rain

+ ADD ELEPHANT

Grey Mystery

(3344556)  EDIT

Sex	Genus	Date Born
Female	Asian	1/5/1986 (Estimated)
Date Entered Captivity		Date Arrived At Current Institution
1/5/1992 (Estimated)		10/3/1998 (Known)
Date of Death / Departure		Additional Info About Departure
DD/MM/YYYY		N/A

Related Elephants At Your Collection

Daughter	Son
Chiang Lek	Rain

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Assessment Results

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Section A

Qualitative Behavioural Assessment

 COMPLETE

Section B

Daytime activity

ENTER ASSESSMENT

Section C

Night-time activity

 COMPLETE

Grey Mystery

Smoke

Chiang Lek

Rain

+ ADD ELEPHANT

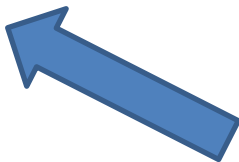
Grey Mystery

(3344556)  EDIT

Sex	Genus	Date Born
Female	Asian	1/5/1986 (Estimated)
Date Entered Captivity		Date Arrived At Current Institution
1/5/1992 (Estimated)		10/3/1998 (Known)
Date of Death / Departure		Additional Info About Departure
DD/MM/YYYY		N/A

Related Elephants At Your Collection

Daughter	Son
Chiang Lek	Rain



 VIEW SUMMARY OF HEALTH

Assessment Results


Enter more assessment data to view the assessment results

ASSESSMENTS

All sections should be completed within one week (7 consecutive days)

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Qualitative Behavioural Assessment

 COMPLETE

Section B

Daytime activity

ENTER ASSESSMENT

Section C

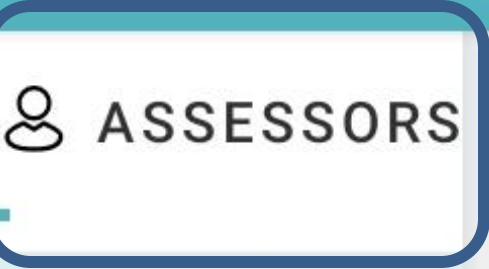
Night-time activity

 COMPLETE

 ELEPHANTS  ASSESSORS

Grey Mystery

Smoke



+ ADD ELEPHANT

Grey Mystery

(33445...  EDIT

Sex	Genus	Date Born
Female	Asian	1/5/1986 (Estimated)
Date Entered Captivity	Date Arrived At Current Instituti	
1/5/1992 (Estimated)	10/3/1998 (Known)	
Date of Death / Departure	Additional Info About Departure	
DD/MM/YYYY	N/A	

Related Elephants At Your Collection

 [VIEW SUMMARY OF HEALTH](#)

Assessment Results

ASSESSMENTS

All sections should be completed within one week (7 consecutive days)

Section A

Qualitative Behavioural Assessment

ENTER ASSESSMENT

Section B

Daytime activity

ENTER ASSESSMENT

Section C

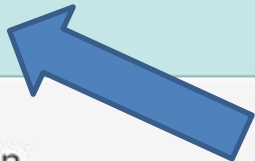
Night-time activity

 ELEPHANTS

 ASSESSORS

Mary Phillips

Joseph Timpson



+ ADD ASSESSOR

Mary Phillips

 EDIT

Title / Role	Email Address	Phone Number
Head Keeper	mphillips@gmail.com	07712345678
No. of Years Working At Institution	No. of Years Working With Elephants	
3 years	16 years	

Grey Mystery

Smoke

+ ADD ELEPHANT

Grey Mystery

(33445...  EDIT

Sex	Genus	Date Born
Female	Asian	1/5/1986 (Estimated)
Date Entered Captivity	Date Arrived At Current Institutio	
1/5/1992 (Estimated)	10/3/1998 (Known)	
Date of Death / Departure	Additional Info About Departure	
DD/MM/YYYY	N/A	

Related Elephants At Your Collection

 VIEW SUMMARY OF HEALTH

Assessment Results

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All sections should be completed within one week (7 consecutive days)

Section A

Qualitative Behavioural Assessment

ENTER ASSESSMENT

Section B

Daytime activity

ENTER ASSESSMENT

Section C

Night-time activity

 ELEPHANTS  ASSESSORS

Grey Mystery

Smoke

+ ADD ELEPHANT

Grey Mystery

(33445...  EDIT

Sex	Genus	Date Born
Female	Asian	1/5/1986 (Estimated)
Date Entered Captivity	Date Arrived At Current Instituti	
1/5/1992 (Estimated)	10/3/1998 (Known)	
Date of Death / Departure	Additional Info About Departure	
DD/MM/YYYY	N/A	

Related Elephants At Your Collection

 VIEW SUMMARY OF HEALTH

Assessment Results

ASSESSMENTS

All sections should be completed within one week (7 consecutive days)

Section A

Qualitative Behavioural Assessment

ENTER ASSESSMENT

Section B

Daytime activity

ENTER ASSESSMENT

Section C

Night-time activity

 ELEPHANTS  ASSESSORS

Grey Mystery

Smoke

+ ADD ELEPHANT

Grey Mystery

(33445...  EDIT

Sex	Genus	Date Born
Female	Asian	1/5/1986 (Estimated)
Date Entered Captivity	Date Arrived At Current Instituti	
1/5/1992 (Estimated)	10/3/1998 (Known)	
Date of Death / Departure	Additional Info About Departure	
DD/MM/YYYY	N/A	

Related Elephants At Your Collection

 VIEW SUMMARY OF HEALTH

Assessment Results

ASSESSMENTS

All sections should be completed within one week (7 consecutive days)

Section A

Qualitative Behavioural Assessment

ENTER ASSESSMENT

Section B

Daytime activity

ENTER ASSESSMENT

Section C

Night-time activity

 ELEPHANTS  ASSESSORS

Grey Mystery

Smoke

+ ADD ELEPHANT

Grey Mystery

(33445...  EDIT

Sex	Genus	Date Born
Female	Asian	1/5/1986 (Estimated)
Date Entered Captivity	Date Arrived At Current Instituti	
1/5/1992 (Estimated)	10/3/1998 (Known)	
Date of Death / Departure	Additional Info About Departure	
DD/MM/YYYY	N/A	

Related Elephants At Your Collection

 VIEW SUMMARY OF HEALTH

Assessment Results

ASSESSMENTS

All sections should be completed within one week (7 consecutive days)

Section A

Qualitative Behavioural Assessment

ENTER ASSESSMENT

Section B

Daytime activity

ENTER ASSESSMENT

Section C

Night-time activity

 ELEPHANTS  ASSESSORS

Grey Mystery

Smoke

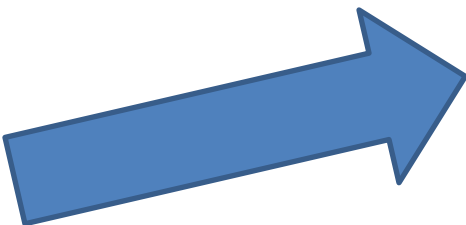
+ ADD ELEPHANT

Grey Mystery

(33445...  EDIT

Sex	Genus	Date Born
Female	Asian	1/5/1986 (Estimated)
Date Entered Captivity	Date Arrived At Current Instituti	
1/5/1992 (Estimated)	10/3/1998 (Known)	
Date of Death / Departure	Additional Info About Departure	
DD/MM/YYYY	N/A	

Related Elephants At Your Collection



 VIEW SUMMARY OF HEALTH

Assessment Results

ASSESSMENTS

All sections should be completed within one week (7 consecutive days)

Section A

Qualitative Behavioural Assessment

ENTER ASSESSMENT

Section B

Daytime activity

ENTER ASSESSMENT

Section C

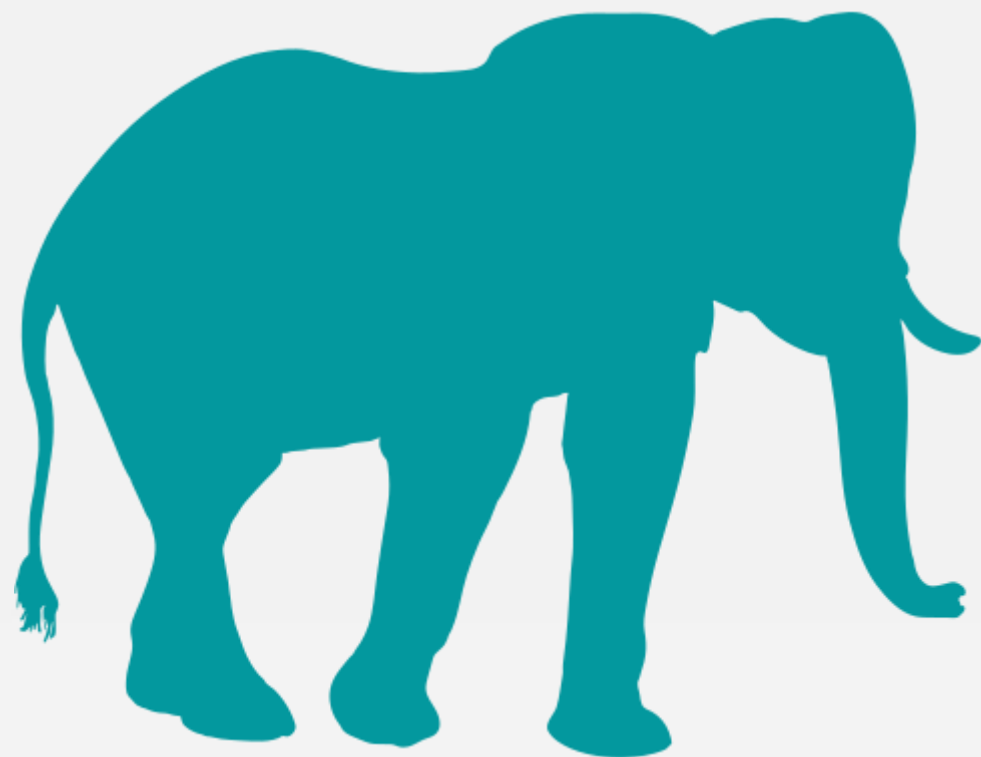
Night-time activity

Elephant Welfare Project

Elephant Behavioural and Welfare Tool

If you still have questions, please contact us at

EWP@nottingham.ac.uk



www.elephantwelfareproject.org

