

GREAT LAKES ALMANAC MUS RAU

NTSES KOOB CWS

KEV TXHEEB XYUAS THIAB KEV TSHAJ TAWM

Ua hauj lwm ua ke rau cov dej uas noj qab haus huv



QHOV TEEB MEEM YOG DAB TSI?

Cws (crayfish) yog yam tsiaj yug nyob hauv lub tub iav yug ntses thiab siv ntau zaus nyob rau hauv chav kawm. Cov neeg uas muaj lub siab zoo feem ntau tso cov cws uas tsis yog cov cws (crayfish) xeeb txawm uas tsis xav tau rau hauv hav dej, qhov chaw uas lawv tuaj yeem ua rau muaj kev phom sij thiab muaj kev puas tsuaj rau peb ib puag ncig. Lawv yuav vam sai heev, los txeeb yeej cov cws xeeb txawm tej zaub mov thiab chaw nyob. Qee cov cws (crayfish) uas muaj kev ua phem tsim cov qhov uas tob, uas thaum muaj coob lawm yuav ua rau muaj kev puas tsuaj rau tej chaw nyob thiab ua rau cov ntug dej pob npau ntau dhau. Kev tswj cov cws (crayfish) uas muaj kev ua phem thaum lawv twb tau huaj vam huav tus dej uas yuav tau siv peev ntau thiab kev tshem tawm cov cws kom tag yog qhov nyuaj.

Muaj ntau hom cws (crayfish) uas tau muag hauv khw muag khoom tau tshwm sim nyob rau hauv hav dej txhua qhov chaw deb ntawm lawv qhov chaw nyob hav zoov hav tsuag. Cov neeg muag tub iav ntim ntses, cov muag khoom, thiab cov neeg nyiam yug ua ib qhov hauj lwm ua si thiaj yog cov tseem ceeb thiab muaj hwj chim los pab cov kws tshawb fawb hauv kev nrhiav thiab tiv thaiv cov cws (crayfish) uas muaj kev ua phem los ntawm kev ua raws li cov lus qhia hauv phau ntawv me no.

KOJ PUAS TAU PAUB?

- Muaj ntau tshaj **670 hom cws (crayfish)** thoob ntiaj teb, thiab lawv yog cov tswv cuab tseem ceeb ntawm cov lab npauv ib puag ncig hauv hav dej.
- **Cws (crayfish) yuav tsum tsis txhob tso rau hauv ib puag ncig.** Qhov no suav nrog cov cws uas muag mus ua tsiaj yug, muag mus noj, thiab rau chav kawm.
- Cov cws uas tsis yog cov cws (crayfish) **xeeb txawm hauv thaj chaw yog ib qho kev hem thawj loj rau cov tsiaj hauv dej thiab tuaj yeem ua rau muaj kev hloov pauv ib puag ncig** xws li ntug dej pob thiab kev puas tsuaj ntawm cov nroj tsuag dej tseem ceeb.
- Cov khw txhem muag cws (crayfish) tau yug los ntawm cov neeg yug ua cov tes dej num uas nyiam ua thiab cov neeg yug cws thoob ntiaj teb kom muaj ntau **cov xim, cov qauv xim, thiab tus qauv duab** uas ua rau nws txheeb xyuas nyuaj.



Ob daim duab yog tus cws (*Procambarus clarkii*) los sis hu ua tus cws xim liab (*red swamp crayfish*)

COV CWS (CRAYFISH) HAUV KEV TXHAWJ XEEB

Hauv cheeb tsam Cov Pas Dej Loj, plaub hom cws (crayfish) no feem ntau yuav pom nyob rau hauv kev lag luam: cov cws xim kua xeb (rusty crayfish) (*Faxonius rusticus*), cws xim liab (red swamp crayfish) (*Procambarus clarkii*), cws xim pob zeb mos (marbled crayfish) (*Procambarus virginalis*), thiab cws Teb Chaws Australia (Australian crayfish) (*hom cws Cherax*). Cov ntaub ntawv qhia nyob rau hauv daim ntawv no yuav pab koj txiav txim siab seb koj puas muaj ib tug ntawm cov cws no uas tsis yog hom cws (crayfish) xeeb txawm hauv thaj chaw.



Cws xim kua xeb (rusty crayfish)



Cws xim liab (red swamp crayfish)



Cws xim pob zeb mos (Marbled crayfish)



Cws Teb Chaws Australia (Australian crayfish)

Qhov no tsis tau lees tias cov ntaub ntawv hauv phau ntawv me no yuav pab tau cov khw muag khoom lag luam me nrhiav tau txhua qhov xwm txheej ntawm cov cws (crayfish) uas muaj kev ua phem. Lub hom phiaj yog muab cov ntaub ntawv txog kev ua neej thiab kev txheeb xyuas rau tiv thaiv kev nthuav qhia yav tom ntej.

PUAS YOG POM IB TUG XAV TIAS YOG TUS CWS (CRAYFISH) UAS MUAJ KEV UA PHEM? UA COV KAUI RUAM NO:

Tsis hais txog qhov uas raug txoj cai ntawm kev muag thiab muaj cws (crayfish) ntawm tes, yuav tsum tshem tawm cov cws (crayfish) uas xav tais yuav yog tus cws uas muaj kev ua phem tawm ntawm lub chaw rau khoom thiab tshaj tawm. Ua raws li cov kauj ruam no.

1. Yees ntau daim duab uas pom tseeb zoo, nrog rau kev yees duab ze ntawm ntau lub ces kaum thiab daim duab yeev kom pom tag nrho tus cws (crayfish) lub cev sab saud sab hauv tib si. Qhia rau koj lub xeev lub koom haum peev txheej hav zoov hav tsuag (DNR, DEC, lwm yam.).
2. Muab tus cws (crayfish) tua los ntawm muab tso rau hauv lub tub yees chav txias cia ib hmos kom nws tuag.
3. Tsis txhob siv tus cws (crayfish) uas tseem ciaj-ciaj, uas muaj kev ua phem rau kev pub ntsees hauv lub tub iav uas yog lwm hom ntsees. Tej zaum koj yuav raug thov kom khaws lub cev tuag cia rau kev txheeb xyuas txuas ntxiv.



COV TSWV YIM QHIA NTAWM DAIM DUAB: Yees duab rau ntawm qhov chaw uas muaj xim nyob rau tom qab. Xyuas kom ntseeg tau tias tsis muaj tus duab ci rov qab los sis duab ntxoov ntxoo. Tso koj txhais tes rau saum ib qho chaw ruaj khov kom ntseeg tau tias koj txhais tes ruaj khov (yog muaj tej qho plooj yuav ua rau kev txheeb xyuas tau nyuab!)

COV TSWV YIM QHIA UAS TSHAJ LIJ:

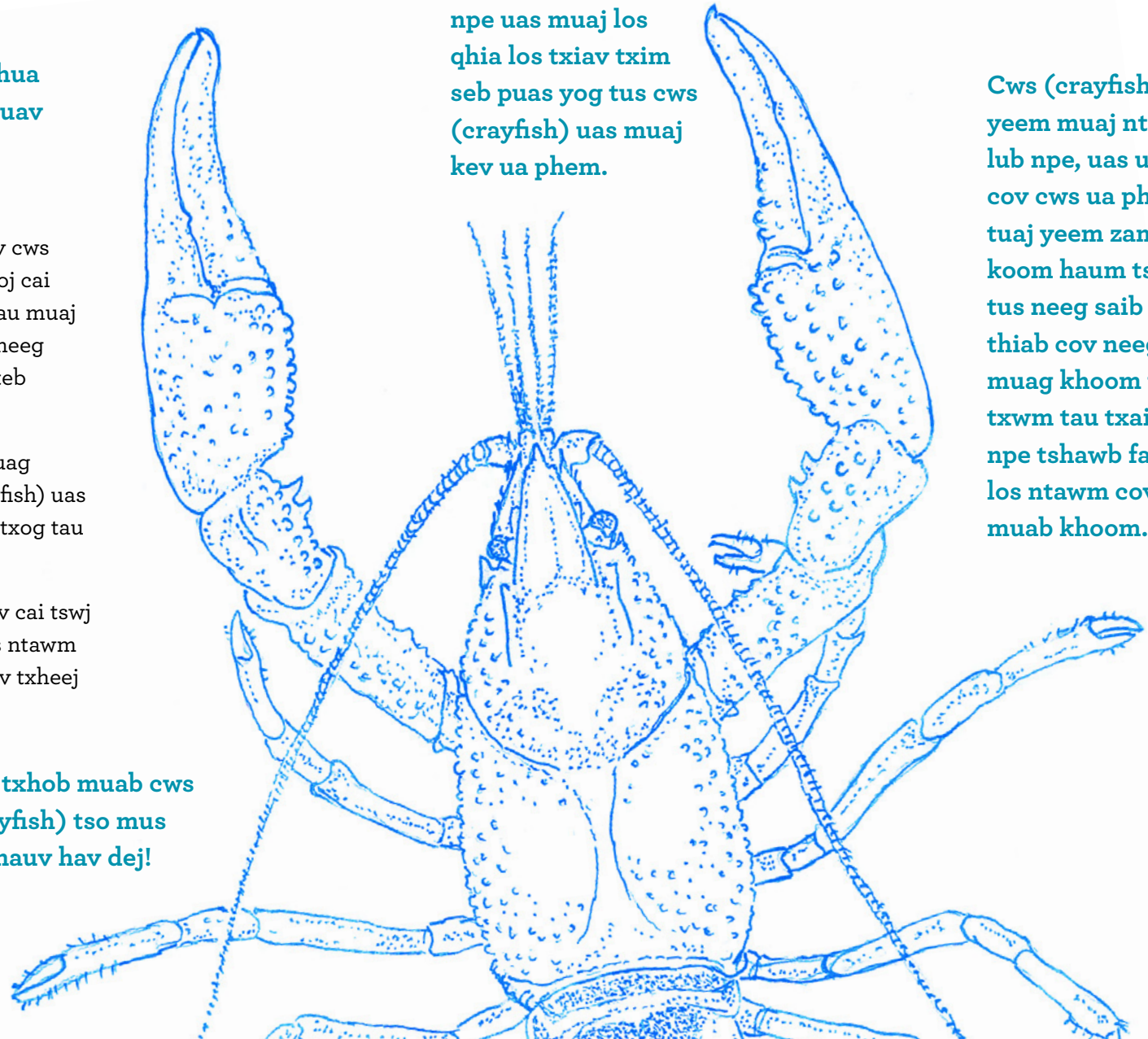
Tshuaj xyuas thiab tshaj tawm txhua yam kev xa khoom uas tej zaum suav nrog tus cws (crayfish) uas muaj kev ua phem.

- » Cov kev cai hais txog kev muag cov cws (crayfish) tsuas yog muaj raws li txoj cai hauv xeev thiab sib txawv, uas ua rau muaj kev tsis sib haum xeeb ntawm cov neeg muag khoom uas xa khoom thooob teb chaws.
- » Qhov no ua rau cov neeg txhem muag khoom tau txais cov hom cws (crayfish) uas muaj kev ua phem yam tsis tau ras txog tau yooj yim.
- » Ua kom muaj kev paub zoo txog cov cai tswj cov tsiav nyob hauv koj lub xeev los ntawm kev tiv tauj koj lub koom haum peev txheej ntuj tsim.

Tsis txhob muab cws (crayfish) tso mus rau hauv hav dej!

Siv cov yam ntxwv cev nqaij daim tawv es tsis txhob saib raws xim los sis lub npe uas muaj los qhia los txiav txim seb puas yog tus cws (crayfish) uas muaj kev ua phem.

Cws (crayfish) tuaj yeem muaj ntau lub npe, uas ua rau cov cws ua phem tuaj yeem zam lub koom haum tswj tus neeg saib xyuas thiab cov neeg muag khoom tau. Ib txwm tau txais lub npe tshawb fawb los ntawm cov neeg muab khoom.



PEB TAB TOM THOV RAU KEV TSHAWB FAWB NKAUS XWB!

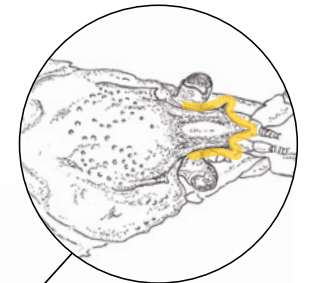
Nws tsis ua teeb meem yog tias muaj tus cws (crayfish) tso rau hauvkoj lub thooob, peb tsuas yog thov kom koj tshaj tawm rau koj lub xeev lub koom haum peev txheej ntuj tsim xwb.

CWS (CRAYFISH) UA PHEM TXHAWM RAU CEEV FAJ RAU

Kuaj xyuaskoj cov cws (crayfish) nrog plaub hom no uas siv cov yam ntxwv txheej txheem ntawm lub cev uas tseem ceeb. Yog tias txhua yam ntawm cov txheej txheem lub cev zoo sib xws, nws yuav muaj peev xwm tias tus cws (crayfish) no muaj kev ua phem tau.

Cov cws xim kua xeb (rusty crayfish) no yuav muaj lub taub hau nqaim ntse ntawm tus hauv paus kub ntawm taub hau.

Cov cws xim kua xeb (rusty crayfish) feem ntau muaj tej tee 'xeb' xim av ze ntawm 2 txhais taw taug kev nram qab kawg thiab muaj tej theem xim dub nyob ib ncig ntawm tus tais ciaj.



Cws xim kua xeb (Rusty crayfish) | *Faxonius rusticus*

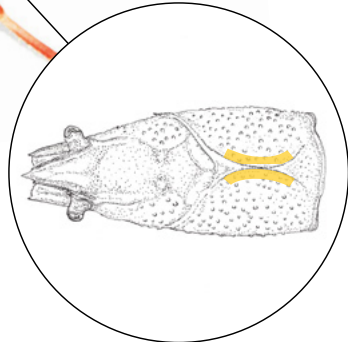
Cov cws xim kua xeb (rusty crayfish) tshwm sim nyob rau nram qab ntawm Tus Niam Dej Ohio, feem ntau pom muaj muag ua kab nuv ntses thiab tseem pom muag coj mus tso saib hauv lub tub iav yug ntses.

Cws xim liab (Red swamp crayfish) | *Procambarus clarkii*

Cov cws xim liab (red swamp crayfish) no tshwm sim nyob rau thaj tсам ntawm Teb Chaws Mes Kas yav qab teb, yog hom uas nyiam yug ntau tshaj plaws hauv ntiaj teb. Cov cws hom no muaj ntau lub npe hu xws li cws (crawfish) xim liab, cws (crayfish) Louisiana thiab cws (ghost lobster) peb xim.



Cws xim liab (red swamp crayfish) nyob pas dej muaj ntau yam xim sib txawv (xim dawb, xim ntshav, xim xiav). Lawv cov rau tes feem ntau muaj tus duab 'zoo li rab ntaj' thiab muaj cov pob thoob plaws. Cov pob no yog xim liab tsaus nyob rau hauv cov cws xim liag (red swamp crayfish). Ntau hom cws uas muaj cov pob tej zaum yuav muaj xim sib txawv ntawm cov pob tab sis yog tshawb xyuas kom zoo, tej zaum yuav muaj tej tee xim liab rau cov pob.

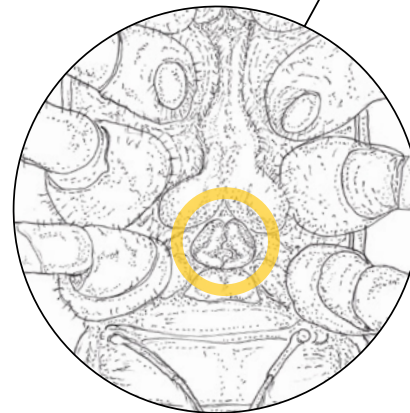
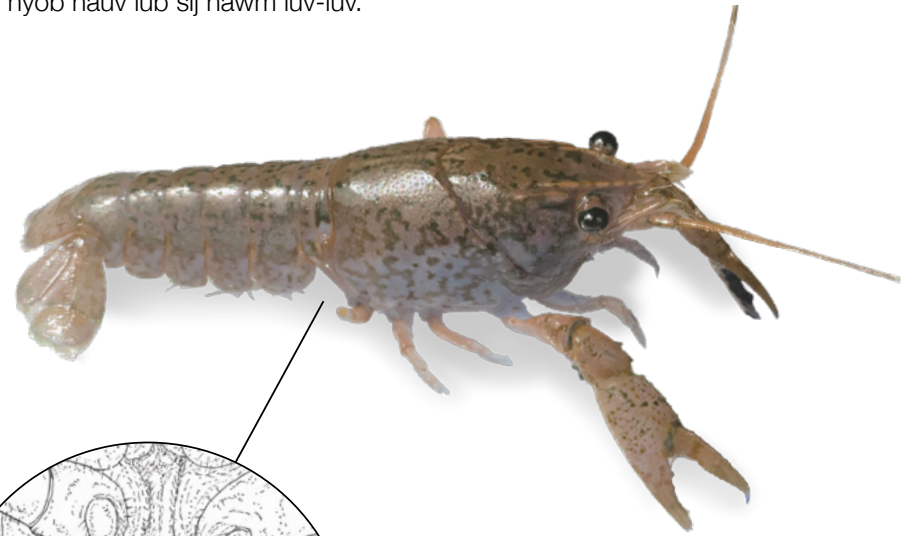


Cov cws xim liab (red swamp crayfish) feem ntau muaj 'ob sab ntsov ntawm lub taub hau kaw ntom', txhais tau tias ob txoj kab nkhaus saum lub tob hau los sib ti nkwb nkaus.

Cws xim pob zeb mos (Marbled crayfish) *Procambarus virginalis*

Procambarus virginalis

Cws xim pob zeb mos (marbled crayfish) (los sis marmokrebs) tau pib tshwm sim los ntawm kev muag hauv lub tub iav rau ntse thiab feem ntau hu ua tus cws (crayfish) uas tuaj yeem tsim me nyuam ntawm nws tus kheej. Txhua tus cws xim pob zeb mos (marbled crayfish) yog tus maum thiab cov me nyuam cws yog tsim los ntawm tus maum. Muaj kev txhawj xeeb heev txog cov hom cws no vim tias ib tus maum cws tuaj yeem tsim tau tag nrho cov me nyuam nyob hauv lub sij hawm luv-luv.



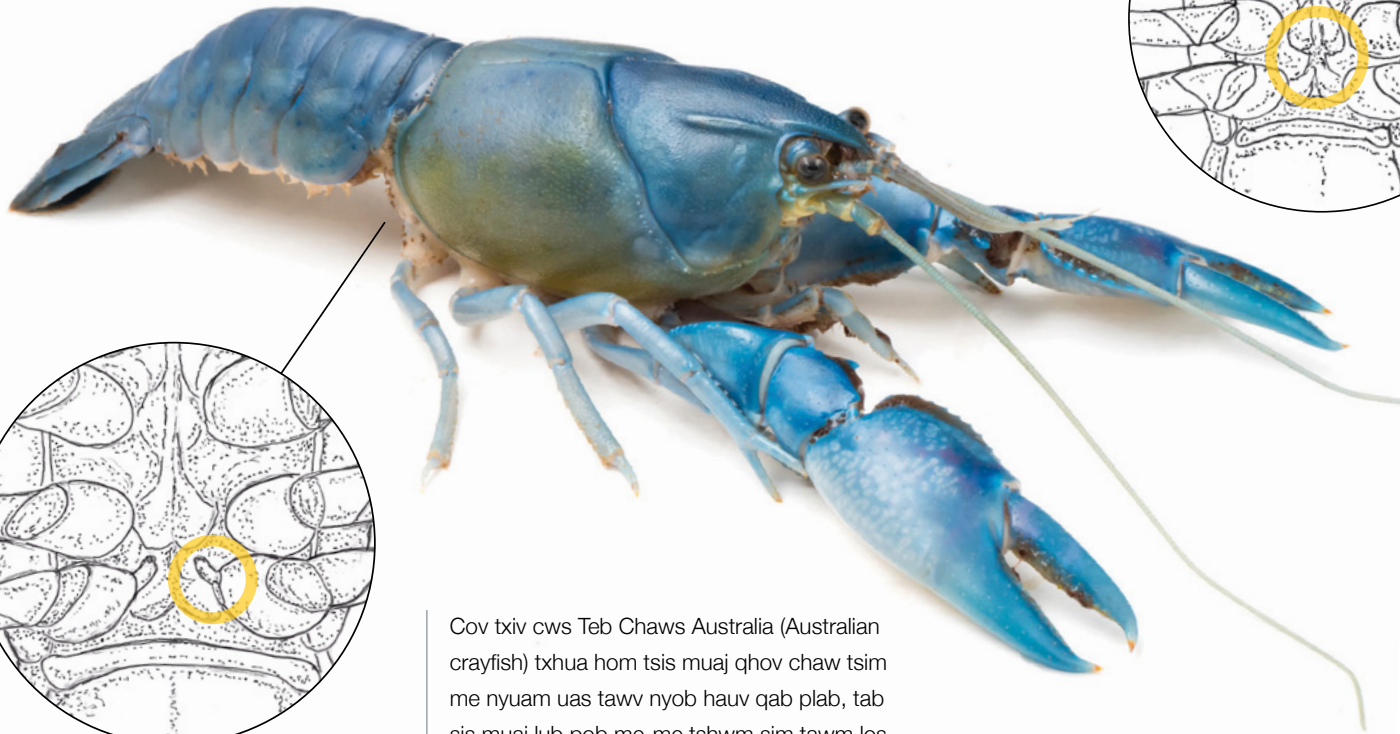
Cov cws no muaj qauv ua tej kab uas sib txawv, tab sis lwm hom tej zaum yuav zoo sib xws. Tus txiv cws (crayfish) uas muaj tus qauv zoo li no tsis yog tus cws xim pob zeb mos (marble crayfish).

Txhawm rau txiav txim siab tias nws puas yog ib tug maum, nrhiav qhov uas zoo li ib lub hnab zoo li lub voj voog zoo li kheej-kheej nyob rau hauv qab ntawm ob txhais ceg taug kev khub kawg. Qhov no yog lub hnab phev (hu ua 'annulus ventralis').

Cws Teb Chaws Australia (Australia crayfish) | *Cherax*

Cws Teb Chaws Australia (Australian crayfish) tsis yog hom uas tshwm sim nyob hauv As Mes Kas Sab Qaum Teb. Hauv Teb Chaws Mes Kas, muaj kev txhawj xeeb rau cov cws yabbies feem dav (Cws *cherax destructor*) thiab cws (crayfish) cija liab (*cherax quadricarinatus*). Cws Teb Chaws Australia (Australian crayfish) tshwj xeeb qee zaus hu ua “cws yabby” nkaus xwb. Cov cws no yuav pom muaj muag ua tsiaj yug thiab pom tias yog cov cws uas loj dua. Qee tus cws kuj zoo ib yam li cov cws (lobster) dej hiav txwv thiab.

Cws yabby feem dav



Cov txiv cws Teb Chaws Australia (Australian crayfish) txhua hom tsis muaj qhov chaw tsim me nyuam uas tawv nyob hauv qab plab, tab sis muaj lub pob me-me tshwm sim tawm los ntawm tus ntug ntawm lub hauv paus ntawm ob txhais ceg taug kev nram kawg hu ua ‘lub pob tsim noob neej’.



Cws uas muaj tus rau xim liab (tus maum)

Tag nrho cov maum cws Teb Chaws Australia (Australian crayfish) tsis muaj lub hnab phev zoo ib yam li hom As Mes Kas Sab Qaum Teb uas muaj (saib cov cws xim pob zeb mos (marbled crayfish) rau kev sib piv).

Hauv tus txiv cws (crayfish) cija liab, sab ntug tus tais cija sab nraud feem ntau muaj tej tee liab me ntsis thiab muaj xim ci ntsa iab. Qee hom cws Teb Chaws Australia kuj tseem muaj tej thaj zoo li no tab sis yog xim dawb.



Cws cija liab (tus txiv)

Qhov khoos kas no tau txais nyiaj pab ib feem los ntawm Lub Khoos Kas Muab Nyiaj Pab Rau Hom Tsiaj Uas Muaj Kev Ua Phem Ntawm Michigan thiab los ntawm Teb Chaws Mes Kas Lub Koom Haum Tiv Thaiv Ib Pwas Ncig los ntawm Txoj Hauv Kev Pib Rau Kev Kho Kom Zoo Rov Qab Los Rau Cov Pas Dej Loj. Nws tau tsim tawm nyob rau hauv kev koom tes nrog cov koom tes hauv qab no:



TUS QHAB NIA DAIM DUAB QHIA: PREMEK HAMR
DAIM DUAB CWS XIM KUA XEB (RUSTY CRAYFISH) THIB 2: BOB MCNAMARA

Yog xav paub ntiv txog cws (crayfish) thiab lwm yam cws uas muaj kev ua phem nkag mus rau koj lub xeev lub chaw hauj lwm saib xyuas peev txheej hav zoov hav tsuag lub vev xaib