

TAWNAENHKI OOTA KAW-AYAWYIN?

*Kishkinoustahiwaywin ishi Kenadaw
sa Namoo-Naurel Aykoutouwouhk
ouhpikistowin*



**Canadian Council
on Invasive Species** **Conseil Canadien des
Espèces Envahissantes**

1. [Kenadaw aen Shadroon](#)
2. [Nipahiwaymakan
Mushkegiwun lee fwaen](#)
3. [European Li vayr Nikrivis](#)
4. [European En mouray Li
lezawr](#)
5. [Lee pchi pwesoun](#)
6. [Vyalet nwaenr Li vyalet
nwaenr](#)
7. [Rouzh-zaray La torcheu](#)
8. [Spongy Aen poo't teneu](#)



Canadian Council
on Invasive Species

Conseil Canadien des
Espèces Envahissantes

FUNDED BY
CANADA
SERVICE
CORPS

FINANÇÉ PAR
SERVICE
JEUNESSE
CANADA

Canada



ONTARIO
INVASIVE PLANT
COUNCIL

TAWNAENHKI OOTA KAW-AYAWYIN?

Kishkinoustahwaywin ishi Kenadaw sa Namoo-Naurel Aykoutouwouhk ouhpikistowin



Kenadaw aen Shadroon (*Cirsium arvense*)



- Il i pat rof lee rasinn
- Lee fawy avek wawikiwawn mouhkomantouskwawnawayw pi plaen'd zhveu awnter waweekakan
- Lee fleur avek blawn ishi li vyalet nwaenr, tapishkoot maykwun

2 -5 ft
ishkwawin

Tawnday ouschi aykwawnima? Pi tawnsheeshi kee-keetukoushin oota?

Ooma nipahiwaymakan aykoutouwouhk ouhpikistowin kaw-kishkayistakwuhk ishi "Kenadaw" aen Shadroon namoo aykwawnima Kenadaw ouschi mawka mawshkoot kee-oushciwawn didawn l'est Mediterranean la riizhyoon. Weeput lee promyee blawn kawkeetakooshikik didawn Li Nor La Mayrik itrawnzhee aykwawnima, pi kee-wawnayshaywin sa noo akouz Neu England oweekowuk kee-nawspichi kishkinwahikayw sa takoushinaywin ishi Lee Kenyaen mayshkootounikaywuk ouschi Kenadaw.



Ooma nipahiwaymakan aykoutouwouhk ouhpikistowin meena pimawtishaymakun li salay kawwawshaynikayt pi mawan ouhpikin kaw-wawshtayk pi kaw-washkawaymakuhk ashtaywina tapishkoot oo bor li shmaen, daw la ditch, li pawr pi li shawn di fwaen ouschi weeput Zhaen shawpou li zitee. Lee shadroon chikee ouhpikin daw aen pchi shmaen daryayr didawn en drous vil, pi daw en vil en vaerzh mawka nawut ouhtitow daw la ditch, li pawr, li shawn di fwaen and oo bor li shmaen.

Tawnaenhki ooma aykoutouwouhk ouhpikistowin pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw?

Ooma Aen Shadroon, avek sa iyikouhk ishpsichawin pi keenow chaypwawa, mitouni mawkoohikaywin ishi kishtikaywina, lee greenn, pi li fwaen di tayr. Itayitakwun mawytoutawkouwin ishi wawshakawshkayhk akouz si risk daw naurel li fayuzh aykoutouwouhk ouhpikistowin pi, ayiwawk chikoushtamihk, ooma li mawnzhee weechihiwaywina li mood kaw-ashpayimouhk. Avek, mawineeshkawkem avek kishtikaywina poor kaw-wawshtayk, kawmiyeu-meechisow, pi diloo, ashaynanamwawn iyikouhk ouhpikowin. Aykwawnima meena weekouwawhk poor menichoushak tapishkoot la ptsi fev menichoushak, la tourb lee vayr kaw-mayitota li zhen blidaend seukree, pi menichoushak kaw-damaazh lee tomaet.



Tawnshi ooma aen shadroon si koum ita kaw-ouhpikow weekouwawhk?

Ihtawun iyikouhk swesawnt deu lee shadroon pi itahtow pi kahkiyow chikee pimawtishow daw jeufarawn wawshakawshkayhk. Ooma "La West aen Shadroon" si naurel ishi Lamayrik nishtamayawmakun daw Pacific-Nor west Ouschi Oregon, Seattle, ishko California, pi wawshkiyawayt daw leu wawshakawshkayhk pi ayow boun pour myeunawniwun poor ayihtawina.



Tawnsheeshi chi-paminama aykwawnihi pi tawndouwuhk atoushkaywina chikee atoushkaystem daw leu neu wawshakawshkayhk?

Ishi pwayzonee lee fayazh didawn awtist lee provayns, en grous vil pi li tayr tipayistamwuk pikou chi-outina Kenadaw aen Shadroon, ispray ishpee kaw-ouhpikin araw tayhkay araw sa kishtikaywina. En ptsit aen shadroon lee plawnt chikee wayhchi outinikawtaywa, awta li groo lee plawnt mawna natawayistawun chi-awpachistahk mashkihkiy. Didawn sa neu wawshakawshkayhk, Kenadaw aen Shadroon chikee itayistakwun chi-ashtawniwun ayiwawk miyoukistaw ayihtawina.

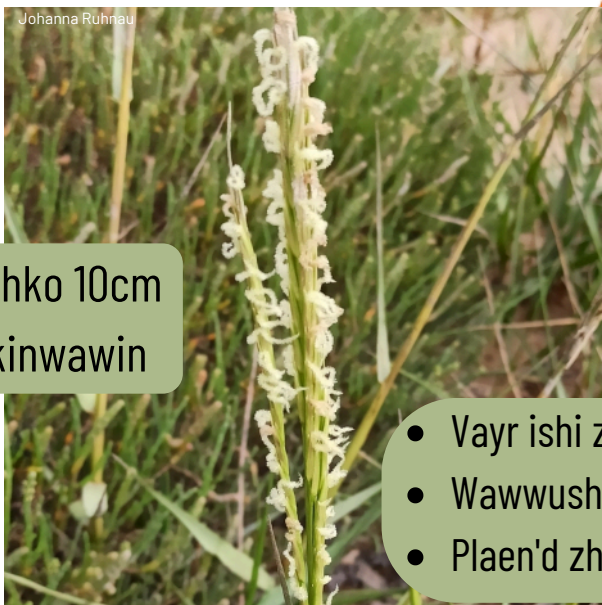


Makouna Oota poor Ayiwawk Kishkayistamoowin ouschi Michigan Li departimawn di Naurel li tayraen Awpachischikana!
Makouna Oota poor Ayiwawk Kishkayistamoowin ouschi Naurel Conservancy di Kenadaw



TAWNAENHKI OOTA KAW-AYAWYIN?

Kishkinoustahiwaywin ishi Kenadaw sa Namoo-Naurel Aykoutouwouhk ouhpikistowin



Ishko 10cm kinwawin

Nipahiwaymakan Mushkegiwun lee fwaen (*Sporobolus* spp.)

- Vayr ishi zhounn koleur
- Wawwushkamoun, saenk-pwaent sa li kael
- Plaen'd zhveu, pwaent, apsheesh napakawa see pat daryayr

Tawnsheeshi ooma aykoutouwouhk ouhpikistowin katakoushinawin didawn Kenadaw?

Tout sort Mushkegiwun lee fwaen chikee mishkikawtayw ou bor lound la mayr Atlantic ohci di Americas, Africa, pi Europe. Saenk Mushkegiwun li fwaen aykoutouwouhk ouhpikistowin kee-mishkikawtayw didawn British Columbia, itay namoo naurel: Lawnglay Mushkegiwun li fwaen, Kishpakikin-Lee fleur Mushkegiwun li fwaen, Li seuk-Li shawn'd fwaen Mushkegiwun li fwaen, pi Pa rof Mushkegiwun li fwaen. Oohin lee grenn di Mushkegiwun lee fwaen chikee mishowayitaymakan shawpou lee twayzoun, la nimal pi la mayr pmichiwunoowin. Mischayt oohin lee fwaen ouschitw kee-nakishkawtoostawniwun ishi kishtikaywina poor erosion paminumoowin. Kootak namoo ouhchitw tashwaykwaypinikaywin li ptsi shmaen avek li bachimaw sa diloo pi mawhtinikawtaywin avek lee zwit mawhtinikawtaywin.

Awpichistawina avek "diloo lee twayzoun, li bachimaw sa diloo, moonahikaywin, aquaculture pi ouhchitw kishtikaywina poor shipunawtuhk paminumoowin" chikee meena mawhtinikawtaywa. Apray tousal ripor ouschi Li seuk-Li shawn'd fwaen Mushkegiwun li fwaen didawn B.C. ishpee 1980s, Gary Williams kee-weestam 2004 aykwawima Lawnglay Mushkegiwun li fwaen kee-oushtawniwun daw la Fraser La rivayr diloo kawpeestikwaystihk awawn 2003, kaw-koushkamik ou bor ouschi Puget Sound awntor deu lee peeyee daw Lamayrik Washington, itay kee-awpachistawin ishi lee zanimoon meechiwin.

Tawndouwuhk atoushkaywina aykoutouwouhk ouhpikistowin ayow daw leu wawshakawshkayhk weekouwawhk?

Daw sa weekouwawhk, Mushkegiwun lee fwaen aykwawnihi kischee weechihiwaywina ouschi li mawnzhee pi a la bree poor aen groo nitwel pi la mayr en sort di kriyaycheur, lee twayzoun, pi menichoosha. Weechistaw chi-nakina shipunawtuhk daw li mushkegiwun akouz sa kishpakowa la rasinn chikee kawshapoostaw ishi la moos-ouschiyawin.

Tawnaenhki ooma aykoutouwouhk ouhpikistowin pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw? Tawnaenhki aykwawnima si aenportaan chi- paminama aykwawnihi?

Nawachikou mischayt lee riizhyoon didawn Kenadaw, Mushkegiwun lee fwaen aykwawnihi pat balawnsee avek sa wawshakawshkayhk akouz ayowa mitouni kishpakowa la rasinn pi chikee meena kawhkehtwawmi oushtawhk kishpeeyin shawpou tou lee deu see lee grenn pi shoohkaykinwa. Oohin wawpaschikaywina nakinem kootak lee plawnt—kiko ashtawniwun li mawnzhee pi a la bree ishi naurel la nimal—ouhpikowin ouschi. Meena kee-katakoowak avek nawut mishawpayin chi-ishkipayichik, wanistawin diloo kawschitinamoowin daw la mayr pi ouhtamihikaywin ouschi li seuk diloo wawshakawshkayhk.

Tawnsheeshi chi-paminama aykwawnihi pi tawndouwuhk atoushkaywina chikee atoushkaystem daw leu neu wawshakawshkayhk?

Mushkegiwun lee fwaen chikee paminikawtayw ishi ashayhkay pimokouchin manipitamoohkawn, wawshakawshkayhk paminumoowin, pi kaw-apachistahk awn pwayzonee. Ashayhkay pimokouchin paminumoowin si aykwawnima nahiykouhk poor en ptsi ikouhk ihtawina, mawka namoo chikee awpatun ayish li fayuzh chikee keestwawm oushtaw ouschi shoohkaykinwa lee moursoo. Li groo, miyou-oushtawniwun ikouhk ihtawin mawna

Pikou chi-paminikawtayk avek awpachistawin la michinn. Mishiway ooma en tayr, kee-mawna keema ouhpikinwa chi-balawnsee li en baw'd kaw-nakishkawtoomakahki wawshakawshkayhk di diloo, miyshkamoowin la tayr shipunawtuhk; chi-manipitam aykshikwuhk li fayr pi hydrocarbons ouschi la tayr; chi-paminahk pashkaymouwin ouschi atmospheric carbon daw la tayr; chi-oushtahk mishiaw-itawpachistawin biomass; pi chi-ashamayw lee zanimoo.

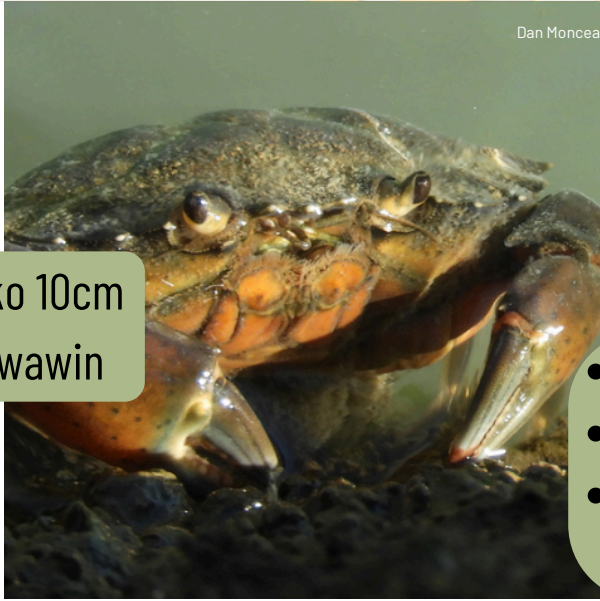
Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Li Gouvornimaw di British Columbia

Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Li departimawn di Li pweeson pi La maenr lee nimal



TAWNAENHKI OOTA KAW-AYAWYIN?

Kishkinoustahiwaywin ishi Kenadaw sa Namoo-Naurel Aykoutouwouhk ouhpikistowin



European Li vayr Nikrivis (*Carcinus maenas*)

- Awn vayr ishi li zhounn koleur
- Wawwushkamoun, saenk-pwaent sa li kael
- Plaen'd zhveu, pwaent, apsheesh napakawa see pat daryayr

Tawnsheeshi ooma aykoutouwouhk ouhpikistowin katakoushinawin didawn Kenadaw?

European Li vayr Nikrivis si naurel ishi lee diloo itay European pi Nor African li tayraen. Aspinay mawna nakishkawtoostawniwun ishi Kenadaw ishpee 1800s namoo ouhchitaw daw li bachimaw diloo ouschi Europe. Kee-itayistakwun chi-mishowayitaymakanoochik shawpou sa mouhtayw ishchikawtaywin kiko mawna keeshipwaypimoustayw shipooshihist aka chi-wawpamihchik daw lee bachimaw.

Neekawn eshiwawpamischik daw Bay di Fundy awashitay ouschi Neu Brunswick ishpee 1951, kootak ihtawin ouschi European Li vayr Nikrivis, aywakooma ouschi li Nor Vawn'd mayr, oushihchihikawshoowuk awashitay Nova Scotia, Prince Edward Li nil, pi li nor Neu Brunswick ouschi 1982. Kootak ihtawin oushtawniwun didawn Salish Vawn'd mayr, awashitay Vancouver Li nil, ishpee 2000s.



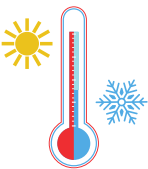
Tawndouwuhk atoushkaywina aykoutouwouhk ouhpikistowin ayow daw leu wawshakawshkayhk weekouwawhk?

Itay Europe, akoutay shinihkawshouwak Li vayr Nikrivis, kwawshkwaypitawuk chi-atawakehk, ayhkatihtakwun si aenportaan ishi li mawnzhee. Meena wawweeput awpachistawn ishi lee vayr kaw-dookwakwashkwaypichikayyawhk.



Tawnaenhki ooma aykoutouwouhk ouhpikistowin pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw? Tawnaenhki aykwawnima si aenportaan chi- paminama aykwawnihi?

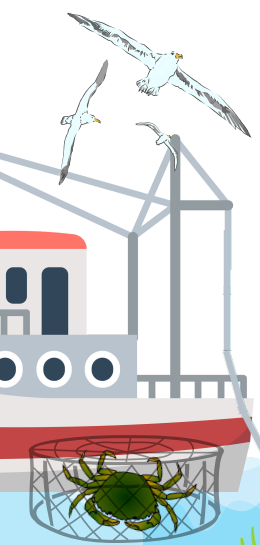
European li vayr nikriviss aykwawniki pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw akouz wiyawow il i soon tournee weechayhtouwak (la fimil chikee-pakitinikawm isho iyikouhk 185,000 wawwa itahtow la bonch pi payyek keema deu lee bonch itahto en awn), chikee il i awnjeuree mischayt kishitaywin ou baendoon tuhkow pi li seuk aywayikouhk daw diloo, pi chikee weekiw daw diloo poor ishko saenk lee zhournee. Meena chikee pray aysha naurel li kael di pwesoon, lee nikrivis, pi meena en ptsit li pwesoon. Sa moonahamoowin kee-itouchikaymakun bioturbation aykwawnima kaw-kee-weechistow ishi mishi-nipahoowin ouschi mamooawayiwin daw Atlantic pi lound la mayr Pacific. Namoo ayawaywuk naurel lee voleur didawn Kenadaw kiko pakitinikouw ikouhk ihtawin chi-ouhpikihk namoo wawpaschikawtaywin.



Tawnsheeshi chi-paminama aykwawnihi pi tawndouwuhk atoushkaywina chikee atoushkaystem daw leu neu wawshakawshkayhk?

European Li vayr Nikrivis chikee paminikawtayw nanatouhk ishi, tapishkoot kaw-ahkamay waypinihchik, kwawshkwaypichikaywin, keema wayschi chi-ashaynamin sa mishowayitaymakanoowin shawpou il i forsee wawpaschikaywin pi kaw-ashashtak nakinikaywina. Daw leu neu wawshakawshkayhk, chikee ahpou itikway awpachihawuk chi-nakinayw napawtahkamishiwa ouschi aquacultured aykoutouwouhk ouhpikistowin tapishkoot lee clawm, senl pi lee zwit.

Keeshpin outa wee-ayowuk avek kiyanawn, ahpou itikway kaw-meeyanawnik ayimihiwaywuk aquacultured bivalves (aykwawnihi, lee clawm, snel, pi lee zwit)—ishpee namoo wiya meetshouwak lee Nikrivis.



Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Li departimawn di Li pwesonyee pi Lout bor la mayr!
Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Washington Li departimawn di Li pweeson pi la maenr!



TAWNAENHKI OOTA KAW-AYAWYIN?

Kishkinoustahwaywin ishi Kenadaw sa Namoo-Naurel Aykoutouwouhk ouhpikistowin



Ishko 23 cm kinwawin

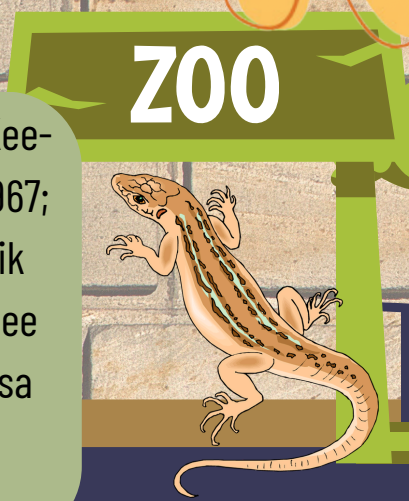


European En mouray Li lezawr (*Podarcis muralis*)

- Shakwalawa li doo avek vayr plaen't grous tash. Li mel ayow li bleu mashinashouwin daw see la bor
- Krem-koleured li vawnt
- Sa daryeen ishkow deu ishohk sa kor
- Itay lee zanimal kaw-kanaymischik

Tawnsheeshi ooma aykoutouwouhk ouhpikistowin katakoushininawn didawn Kenadaw?

Awa European En mouray Li lezawr si naurel ikouyikouhk ouschi Europe. Kee-nakishkawtoostawniwun ishi Kenadaw (British Columbia) awnter 1957 pi 1967; Victoria-tayhkay atoushkayw ita lee zanimal faroush kawkaniwayimischik Rudy Bauersachs kanawayimayw ikouhk ihtawin daw sa koleksyoon. Ishpee 1970, apray Bauersachs kaw-kipahawm sa koleksyoon, kee-pakitinikatw sa European En mouray Li lezawr, kiko mawchi-weekiwuk dahor sa kenawaymoowin apray akouta alawntour lee mood ouchiminamwuk.

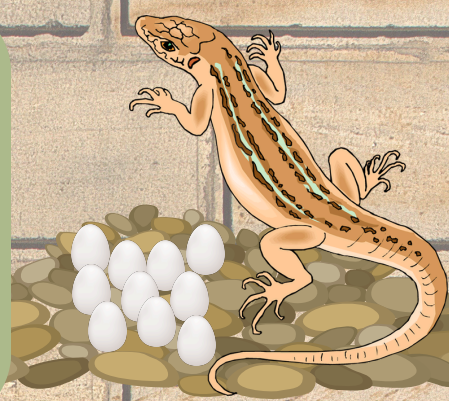


Tawndouwuhk of atoushkaywina aykoutouwouhk ouhpikistowin ayow daw leu wawshakawshkayhk weekouwawhk?

Daw leu wawshakawshkayhk weekouwawhk, European En mouray Li lezawr mawna pray poor lee twayzou, en sort di kriyaycheur, kawnoukawtak, pi lee koulayv.

Tawnaenhki ooma aykoutouwouhk ouhpikistowin pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw? Tawnaenhki aykwawnima si aenportaan chi- paminama aykwawnihi?

Awa European En mouray Li lezawr si pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw akouz miywaywuk menichoosha, li frwii, pi awshkow meena naurel aykoutouwouhk ouhpikistowin kaykawt paray ouschi wawshakawshkayhk niches. Ayowak muwinayshkawkaywin kashkistamashouwin didawn weechayhtouwin pawsci awtist naurel li lezawr aykoutouwouhk ouhpikistowin akouz chikee oushtawniwun mishahkmik wawwa itahtow tou lee zawn.

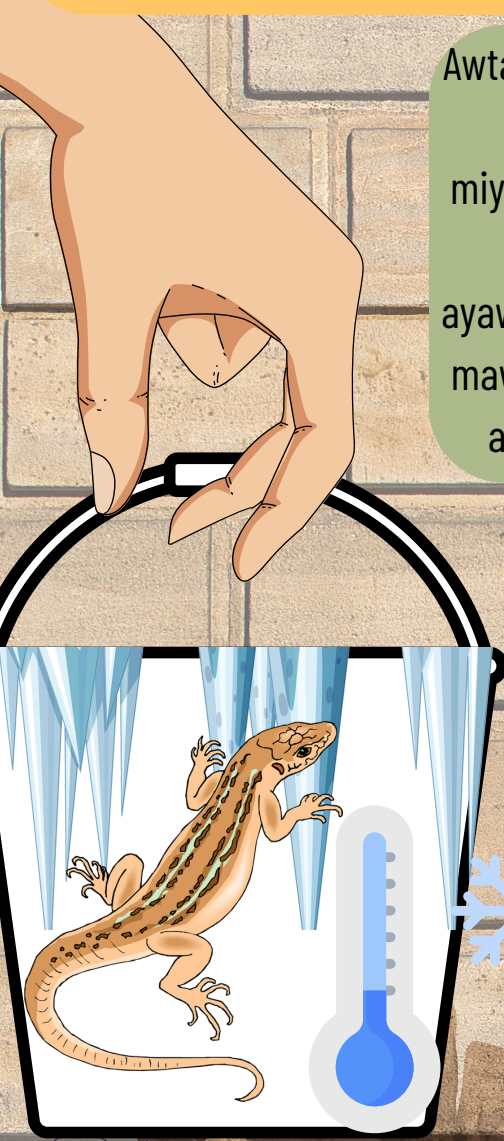


Tawnsheeshi chi-paminama aykwawnihi pi tawndouwuhk atoushkaywina chikee atoushkaystem daw leu neu wawshakawshkayhk?

Awta chikee apataniwun ishi aenportaan li mawnzhee weechihiwaywina poor lee twayzou pi li groo en sort di kriyaycheur, nawaciko chi-miywashin li pyeezh avek chi-kawschitinihk li lezawr. Nawaciko meena chikee nipahowak avek chi-awhkwatichik. Si nissisayr aka chi-ayawihchik, weechayhtouwin, pakitinikawtaywin, atawawkaywin, keema mawhtinikawtaywin kaw-pimawtishichik European en mouray li lezawr akouz ooma chikee ishpayiwin chikee mishowayitaymakanoowin.

Mawka, awtis lee moond daw sud west British Columbia akeewawpamaywuk ishi ameuzee pi paw meshawn la kounpayeen.

Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Nipahiwaymakan Aykoutouwouhk ouhpikistowin En koonsayee di BC
Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Aen zhawn'd Kenadaw Herpetological la Sasyitii



TAWNAENHKI OOTA KAW-AYAWYIN?

Kishkinoustahiwaywin ishi Kenadaw sa Namoo-Naurel Aykoutouwouhk ouhpikistowin



15 - 45 cm
kinwawin



Lee pchi pwesoun (*Carassius auratus*)

- Mshiwawshaynikaywan norawnzh ishi vayr zhounn sa koleur
- Mawacayas cipsayawa sa osoy
- Namoo ayaw la baerb daw sa toon

Tawnday ouschi aykwawnima? Pi tawnsheeshi kee-keetukoushin oota?

Lee pchi pwesoun aykoutouwouhk ouhpikistowin ouschi diloo ki li boon Carp neekawn ouschi East Asia. Sa en zhalee-zhoun nwaehr si la koleur aykwawnima ouschi kakayklnikayshkiw weechayhtouwin avek Crucian Carp pi neekawn kee-mashnipayhtahk didawn Imperial China, pawsi 1000 en awn ashpinae. Anoush, Lee pchi pwesoun aykwawniki si rawr ita kawweekihk chi-kenawayimhk, mishkikawtayw daw pwesoun la tank, chi-kenawayimhk lee stor, pi meena daw il i faroush shawpou li tayr.

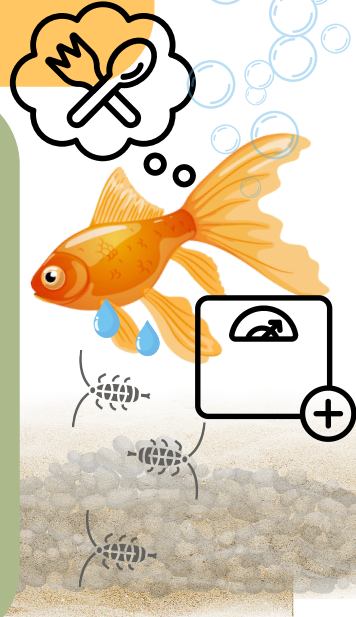


Tawndouwuhk atoushkaywina ayow ita kaw-ouhpikow wawshakawshkayhk?

Daw leu naurel wawshakawshkayhk, lee pchi pwesoun atayhamwak li tayr kiko chikee weechihikow chi-nakina li mawnzee poor lee plawnt pi li mawnzee weechihiwaywina poor kootaka organisms. Lee pchi pwesoun aykwawniki mawineeshkawkayak pi meechiwak tout sort ouschi organisms, awtist aykwawnihi nipahiwaymakan, weechihtaw kahkyuw ayihtawina.

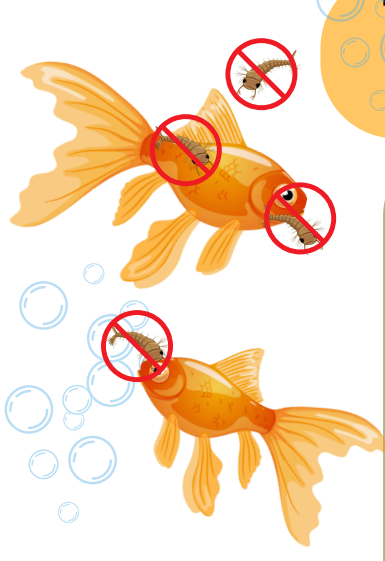
Tawnaenhki ooma aykoutouwouhk ouhpikistowin pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw?

Shawpou en alimael maenshkounikaywin, lee pchi pwesoun kee-nakishkawtoostawniwun lout bor Kenadaw pi akoushpee pakitinikawshoowuk ishi daw piblik li laek ouschi li mood. Lee pchi pwesoun aykwawniki shoohkmatawayw meetshouwak pi chikee ouhpikowuk iyikouhk li groo daw il i faroush ishpischi kaw-kawschitinihk, kaw-meetshouwak naurel li pwesoun, li pwesoun wawwa pi mamoowayiw lee plawnt. Kaw-meetshouchik meena atayhamwak li sawb pi la boo, nawachikou kashkawpastaynawkwun diloo pi nakiman li salay kawwawshaynikayt chi-wawshaynikayt mamoowayiw disour lee plawnt.



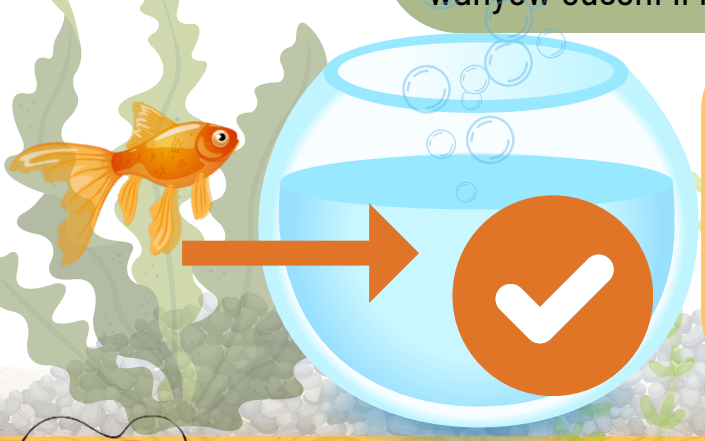
Tawndouwuhk atoushkaywina chikee atoushkaystem daw leu neu wawshakawshkayhk?

Akouz ouschi sa gourmawnjeez kaw-ishi meetshouwak, Lee pchi pwesoun kee-awpachihawak poor Lee maraengwaen ihtawin paminumowin, nakimanoowin Malaria Lee maraengwaen pi ishpayiwun si aenportaan li mawnzee awpachihiwaywuk didawn African li tayraen. Daw li Chinese ishipimawchihounawniwun, awa lee pchi pwesoun si aen shiff di oushawmi pi wiyootishoowin. Awta en zhalee li pwesoun aykwawina miyeu daw pwesoun la tank chi-kenawayimhk, kishishi wahyow ouschi il i faroush chi-kenawayimichik pi Kawiya Pakinik!



Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Ontario Nipahiwaymaka Aykoutouwouhk ouhpikistowin Ashwayistamoowina Paminikaywin

Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Michigan Li departimawn di Naurel li tayraen Awpachischikana



TAWNAENHKI OOTA KAW-AYAWYIN?

Kishkinoustahwaywin ishi Kenadaw sa Namoo-Naurel Aykoutouwouhk ouhpikistowin



Ishko 2.5 m
ishkwawin

Vyalet nwaenr Li vyalet nwaenr (*Lythrum salicaria*)

- Nanatouhk lee rasinn, kawree lee rasinn
- Noo yakashkow, aen groo kloff lee fawy
- aen groo kloff lee fleur pakawnn plat, lee fleur en kouleur di rooz

Tawnsheeshi ooma aykoutouwouhk ouhpikistowin katakoushinawin Kenadaw?

Vyalet nwaenr Li vyalet nwaenr (*Lythrum salicaria*) kee-nakishkawtoostawniwun ishi Li Nor La Mayrik ishpee weeput 19th sawn zawn tou lee deu ouhchituw pi namoo ouhchituw. Ishpee daw 1800s, aykoutouwouhk ouhpikistowin kee-nakishkawtoostawniwun ishi Li Nor La Mayrik tapishkoot aen cheehkinawkwun li fayuzh pi poor lee yawmoo kanwayimwaywin. Vyalet nwaenr Li vyalet nwaenr chikee mishowayitaymakan nawut il i vif shawpou weepow la tayr pi awpachichikana, kee-meena nakishkawtoostawniwun ishi Li Nor La Mayrik ishi kaw-waypinikawtayk la tayr ouschi European lee bachimaw pi itrawnzhee la lenn awpachichikana. Ooma aykoutouwouhk ouhpikistowin ahkamay mishowayitaymakan naturally ouschi li vawn, diloo, il i faroush lee nimal, pi weepow li mood lee bitaen pi awpachischikana pi chikee mishikawtayw daw shawpoupayawa aen shawn'd fwaen, oo bor li shmaen, pi ishkipaywina.



Tawndouwouhk atoushkaywina aykoutouwouhk ouhpikistowin ayow daw leu wawshakawshkayhk weekouwawhk?

Vyalet nwaenr Li vyalet nwaenr atoushkaymakun mitouni emamiyouhk weechiwaywina poor miyoukistaw aykoutouwouhk ouhpikistowin avek lee yawmoo, lee memaengwaen, lee poo't teneur, pi kootak menichoushak. Vyalet nwaenr Li vyalet nwaenr chikee awpachistawn poor li michin ishiawpachsitawina chi-tret nanatouhk awhkoushiwina pi awhkoushiwina pi ishawyawina. Kaykawt tout sa itapachistawina avek poor kaw-weechistow la trip awhkoushiwina, la gorzh weeshakayhtamoowin, pi li troub di paktatawmouwin.

Tawnaenhki ooma aykoutouwouhk ouhpikistowin pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw? Tawnaenhki aykwawnima si aenportaan chi- paminama aykwawnihi?

Vyalet nwaenr Li vyalet nwaenr ayow awtist noo kwayesh wawshakawshkayhk mawkouhtawina. Kaw-mishowayitaymakahk kisheepayin pi oushtawn pischipouwawn la michinn kiko pahkawn ishistaw la tayr chemistry pi nakinem ahkikiwin ouschi naurel li fayuzh aykoutouwouhk ouhpikistowin, akoushchee aciwinem ayihtawina. Ooma itouchikaymakun ispray mawkoohikaywin ishi aykoutouwouhk ouhpikistowin aykwawnima en risk kaw-mamishaytootahk naurel mushkaygiwun lee plawnt poor kaw-weechayhtouwin.



Tawnsheeshi chi-paminama aykwawnihi pi tawndouwouhk atoushkaywina chikee atoushkaystem daw leu neu wawshakawshkayhk?

Kishkayistamoowin tawnsheeshi chi-nistawinamaen pi chi-outinimoowin Vyalet nwaenr Li vyalet nwaenr chi-weechistow kaw-ashaynem mishowayitaymakanoowin ouschi ooma nipahiwaymakan li fayuzh. Didawn tayhkay itay akouta ooma aykoutouwouhk ouhpikistowin si nakwun, si aenportaan aka chi-pachitoustayin daw en traes keema aka pakitinik atimwuk daw sa kawmb ouschi chi-nakinumin mishowayitaymakan ouschi lee grenn. Mayschiywaywin di Vyalet nwaenr Li vyalet nwaenr si namoo akwa si possib ayis ouschi sa oushawmi mishowayitaymakanoowin. Mawka, ihtakwunwa koucheewina chi-paminama ooma mishowayitaymakan ouschi aykoutouwouhk ouhpikistowin, avek ooma nakishkamouhtawin ouschi deu European en fawy-meetshouwak menichooshak - *Galerucella californiensis* pi *Galerucella pusilla*.

Kishkayistamoowin chi-nistawinamaen pi katawa chi-kaychikoonikawtayk pi waypinikawtayk ouschi Vyalet nwaenr Li vyalet nwaenr ouschi daw toon li zhardaen chikee weechistow chi-ashaynem ooma kaw-mishowayitaymakan ouschi aykoutouwouhk ouhpikistowin. Meena, mitouni aenportaan aka chi-pachitoustayin daw en traes keema aka chi-pakitinik li shyaen daw sa kawmb ouschi araw Li vyalet nwaenr aen braen chi-nakinamaen kaw-mishowayitaymakan ouschi lee grenn.



Awta mitouni nipahiwaymakan pi muwinayshkawkayw aykoutouwouhk ouhpikistowin, Vyalet nwaenr Li vyalet nwaenr lee fleur ashtawniwun mitouni emamiyouhk kawawshakawshkayhk ouschi li zheuiwun ishi kaw-miyoukistaw aykoutouwouhk ouhpikistowin didawn sa neu wawshakawshkayhk.

Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Ontario Nipahiwaymakan Li plawnt Ee koonsayee
Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Nipahiwaymakan Aykoutouwouhk ouhpikistowin En plass



TAWNAENHKI OOTA KAW-AYAWYIN?

Kishkinoustahwaywin ishi Kenadaw sa Namoo-Naurel Aykoutouwouhk ouhpikistowin



Rouzh-zaray La torcheu (*Trachemys scripta elegans*)

12 - 30 cm
kinwawin

- Rouz lee koleur tou lee due sa tet
- Vayr en bawr daw sa koo, daryayr pi osoy
- Sa kael pi la poo vayr zhounn ishi shakwalawa

Tawnsheeshi ooma aykoutouwouhk ouhpikistowin katakoushinawin didawn Kenadaw?

Awa Rouzh-zaray La torcheu si naurel ishi Sud-Tayhkay li miljeu Lamayrik. Nakishkawtoostawniwuniwun ishi Kenadaw shawpou en alimael maenshkounikaywin pi il i faroush ikouhk ihtawin aykwawnima kaw-noukwun daw li seu Kenadaw sa ouhcheewin ouschi kaw-pakitinihchik lee alimael.

Tawndouwuhk atoushkaywina aykoutouwouhk ouhpikistowin ayow daw leu wawshakawshkayhk weekouwawhk?

Awa Rouzh-zaray La torcheu kishkinowapamakun aenportaan atoushkaywina didawn sa weekouwawhk en system ayis tou lee deu wiya aen voleur pi li mawnzhee weechiwaywina. Meechiwuk menichoosha, aen pti pwasoon pi lee plawnt. Li groo pwesoon, lee twayzoun, crocodilians, lee koulayv pi ashkaw en sort di kriyaycheur kitawpayihtawchik daw jeufarawn ishchikawtaywina ouschi sapimatishiwina.

Mara Prendergrass keekeeshistawt: "Didawn wiya ikou sa weekouwawhk, ooma [Rouzh-zaray La torcheu] mooshkinahtaw aenportaan wawshakawshkayhk en kwaryaenr tapishkoot tou lee deu li mawnzhee kaykwuy pi aen voleur." Wiyawow aykwawniki kitawpayihchikaywak, meetshouwak menichoosha, en gournouy, pi lee plawnt. Akooz aykwawnima, li groo pwesoon, marsupials, lee twayzoun (tapishkoot en kwamay/koorboo, en betor, pi lee groos bawt), Crocodilians, Aen shaw savazh, Shikawk, Rnawr gree, Lee loo, pi Lee koulayv meetshouwak daw jeufarawn ishchikawtaywina ouschi sapimatishiwina.

Tawnaenhki ooma aykoutouwouhk ouhpikistowin pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw? Tawnaenhki aykwawnima si aenportaan chi- paminama aykwawnihi?

Awa Rouzh-zaray La torcheu si pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw poor awtist li risoon. Mawineeshkawkwuyk avek naurel la torcheu poor li mawnzhee pi natamoushtawkwaywin. Rouzh-zaray La torcheu chikee pimoustatow awhkoushiwin tapishkoot la malajee kiko aykwawnima mitouni kishkayistakwun mawkoohikaywin ishi kat en pat aen famyee'd lee koulayv pi kootakak aen famyee'd lee koulayv. Neepawishtam mawkoohikaywin poor kinwaysh ayis payyek la torcheu chikee pimawtishow ishko 20 awn mawna.

Tawnsheeshi chi-paminama aykwawnihi pi tawndouwuhk atoushkaywina chikee atoushkaystem daw leu neu wawshakawshkayhk?

Awntser ooma Mamoowayiw Nipahiwaymakan Aykoutouwouhk ouhpikistowin La lway awntser ooma Lee lway'd ou Pwesoon, noo chishpayik kaw-pakitiniwun pikou tawnima mamoowayiw aykoutouwouhk ouhpikistowin, tapishkoot Rouzh-zaray La torcheu ishi la riizhyoon keema daw li laek itay aykwawnima namoo indigene. Pikou awiyek kaw-kenawayimayw chi-kenawayimhk li Rouzh-zaray La torcheu pikou chi-kipahikawshouchik chi-nakinikawtayk chi-kenawayimhk pakitinikawtaywin si aykwawnima mawachi apatayistakwun chi-ishi paminama aykoutouwouhk ouhpikistowin. Itay kaw-ahkamay ayowak daw il i faroush, mawka, pikou chi-itouchikawtayk sis itouwahk kischee "wawshakawshkayhk pamihwaywin": geemiyikiw biomass ishi sa wawshakawshkayhk, aymawscheemakahk la fors, li minirael tipayimaenmoowin, ishitoutem tou lee deu aen voleur pi pray, tashwaykwaypinayw li grenn, pi bioturbation.

Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Nova Scotia Nipahiwaymakan Aykoutouwouhk ouhpikistowin Ee koonsayee
Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Aen zhawn'd Kenadaw Il I faroush lee nimal Kaw-Mamamawitowhk



TAWNAENHKI OOTA KAW-AYAWYIN?

Kishkinoustahwaywin ishi Kenadaw sa Namoo-Naurel Aykoutouwouhk ouhpikistowin



Mouhtayw ishchikawtaywin ishko 5 cm ekinwaki

Poonikiwuk: 5 cm en zel ishkawwin

Mishahkamihk wawwa: 5 - 7.5 cm

Spongy Aen poo't teneur (*Lymantria dispar dispar*)

- Mouhtayw avek saenk pawr li bleu mashinashouwin pi sis pawr rouz mashinashouwin
- La sawn koleur, "spongy" wawwa takwashtaywa
- La mil aen poo't teneur aykwawniki shakwalawa pi fimel aen poo't teneur aykwawniki en blawn, tou lee deu avek li nwayr wawwushkamoun mashinashouwin daw see zel

Tawnsheeshi ooma aykoutouwouhk ouhpikistowin katakoushininawn didawn Kenadaw?

Awa Spongy Aen poo't teneur si naurel ishi Eurasia pi li nor Africa. Aspinay mawna pi kee-nakishkawtoostawniwun ishi Li Nor La Mayrik pahki ouschi aen kawpwawtowschikayhk la sway vayr weechayhtouwin kaw-igzaminee. Didawn Kenadaw, mishkikawshouwk didawn Quebec, New Brunswick, Nova Scotia, Ontario pi Prince Edward Li nil. Mishowayitaymakan shawpou mawhcheemakunoowin ouschi si plaen'd koulayv li bwaw kawpoonikawtayk pi tayhkay daw lee rig ouschi si plaen'd koulayv.



Tawndouwuhk atoushkaywina aykoutouwouhk ouhpikistowin ayow daw leu wawshakawshkayhk weekouwawhk?

Didawn sa wawshakawshkayhk weekouwawhk, Spongy Lee poo't teneur mouwayw mischayt li zawbr aykoutouwouhk ouhpikistowin, mawka, ikouhk sa ihtawin pishkayistaniwun ouschi naurel lee voleur.

Tawnaenhki ooma aykoutouwouhk ouhpikistowin pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw? Tawnaenhki aykwawnima si aenportaan chi- paminama aykwawnihi?

Awa Spongy Aen poo't teneur si pat balawnsee avek sa wawshakawshkayhk didawn Kenadaw akouz panawchistow mouhtayw ishchikawtaywin pinawayw pi nipastaw mischayt li zawbr aykoutouwouhk ouhpikistowin. Ooma chikee ashaynem boun pour wawshakawshkayhk pamihwaywin kaw-ashtawniwun ouschi li zawbr, mawkouhtaw il i faroush lee nimal natamoushtawkaywin pi li mawnzhee weechihwaywina. Li tawn pawsee, Spongy Aen poo't teneur mshway ayawwuk chikee kwayshkipayin la foray li zawbr sa rawnzhmawn.

Tawnsheeshi chi-paminama aykwawnihi pi tawndouwuhk atoushkaywina chikee atoushkaystem daw leu neu wawshakawshkayhk?

Mitouni si aenportaan chi-pishkawpamichik Spongy Lee poo't teneur avawn mshway ayawwuk kee-oushtawniwun. Ooma chikee itouchikawtayw shawpou li sawn-en mayaenr lee pyeezh. En ptsit-iyikouhk Spongy Aen poo't teneur mshway ayawwuk chikee wayhchi outinikawtaywa shawpou kawshkahikaywin pi panawchistawin mishahamihk wawwa. La michinn paminumowin ayshitoutchikawtaywin, tapishkoot *Bacillus thuringiensis* la malajee shishoupawtawin, chikee awpachistawn chi-paminama mouhtayw ishchikawtaywin. Spongy Lee poo't teneur itoutamwak oushawm pikou li zawbr nipouwin daw leu neu wawshakawshkayhk pi nawachikou miywashin chi-paminama ooma aykoutouwouhk ouhpikistowin.

Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi the Aen zhawn'd Kenadaw En koosayeeon Nipahiwaymaka Aykoutouwouhk ouhpikistowin
Makouna Outa poor Ayiwawk Kishkayistamoowin ouschi Li Gouvarnimaw di Ontario

